



2007 Tillage Transect Survey Final Report

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Minnesota Board of Water and Soil Resources
and Participating Counties

by

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TABLE OF CONTENTS

PROJECT OVERVIEW	2
Project Area.....	3
ELEMENT 1 – Coordination of Driving Surveys and Testing Procedures	4
ELEMENT 2 – Data Management.....	4
ELEMENT 3 – Driving Route and Data Collection Point GIS Layer Development.....	5
ELEMENT 4 – Web Site Design	7
ELEMENT 5 – Assessment and Reporting	7
Statewide Results	7
County Results	13
Watershed Results	13
DISCUSSION AND RECOMMENDATIONS	21
A New Generation of TTS in Minnesota?	22
Looking Ahead	23
EXHIBIT A: Participation Request Letter and Subcontract Form	25
EXHIBIT B: Procedures for the Tillage Transect Survey and Preferred Data Sheet	31
EXHIBIT C: 22-Crop to 8-Crop Mapping Index.....	45
EXHIBIT D: 2007 State and County Summaries	49
EXHIBIT E: 2007 Major Watershed Summaries	187

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PROJECT OVERVIEW

Tillage Transect Surveys (TTS), also referred to as Crop Residue Management Surveys, have been conducted in Minnesota counties since 1989; however, survey intervals have been irregular. Since 1989, TTS coordination and funding has come from various sources – including federal, state, and local appropriations. The Natural Resource Conservation Service (NRCS) coordinated the effort between 2000 and 2005; however, changing budgets and priorities lessened the NRCS involvement in the TTS process. The value of the TTS data is recognized by many. In 2006, the Minnesota River Board applied for Clean Water Legacy Act funds to complete the TTS for all agricultural counties in Minnesota, believing that the data were needed. In January of 2007, the Farm Journal noted the loss of the National Crop Residue Management Survey as significant. Darrel Smith, the article's author, noted that tillage and residue surveys are very important in a changing agricultural landscape and that these data collections have not yet realized their potential contributions to land and water management.

The Minnesota Board of Water and Soil Resources (BWSR) coordinated several iterations of the TTS prior to the NRCS-led program. As federal oversight for the program was lost, BWSR again facilitated the completion of a survey in 2007. Available funds have allowed for the development of a TTS program in conjunction with the Water Resources Center (WRC) at Minnesota State University, Mankato, with support from the Minnesota River Board. There were five elements to the 2007 TTS:

1. Coordination of Driving Surveys and Testing Procedures,
2. Data Management,
3. Driving Route and Data Collection Point GIS Layer Development,
4. Web Site Design, and
5. Assessment and Reporting.

The sections below provide an overview for each of the elements listed above. During the course of this project, much has been learned about protocol deficiencies and TTS data applicability. In addition, this project represents a significant comprehensive collection of Minnesota residue and tillage surveys conducted through coordination from BWSR, NRCS, and the WRC – all following protocol developed in conjunction with the Crop Residue Management program at the Conservation Technology Information Center (CTIC) at Purdue University.

The 2007 TTS represents the first electronically available resource for residue data in Minnesota and has facilitated the evaluation of residue data not only by county, but by watershed as well. With new electronic versions of the data points, including routes and the 2007 observations, we can now more readily perform efficient surveys that will have more reliable results. Included here are highlights of several issues that need to be addressed and a set of recommendations regarding the next steps in TTS protocol, including a proposed model development, viewer training, and collection requirements.

Project Area

BWSR and WRC staff evaluated past residue survey participation and the agricultural land proportions in each Minnesota county. It was decided that counties with at least 30% of their land area in agriculture were to be included in the 2007 TTS. Therefore, the project area in 2007 included 67 Minnesota counties (Figure 1). The 2007 TTS was completed in the spring of 2007 using the protocol described below.

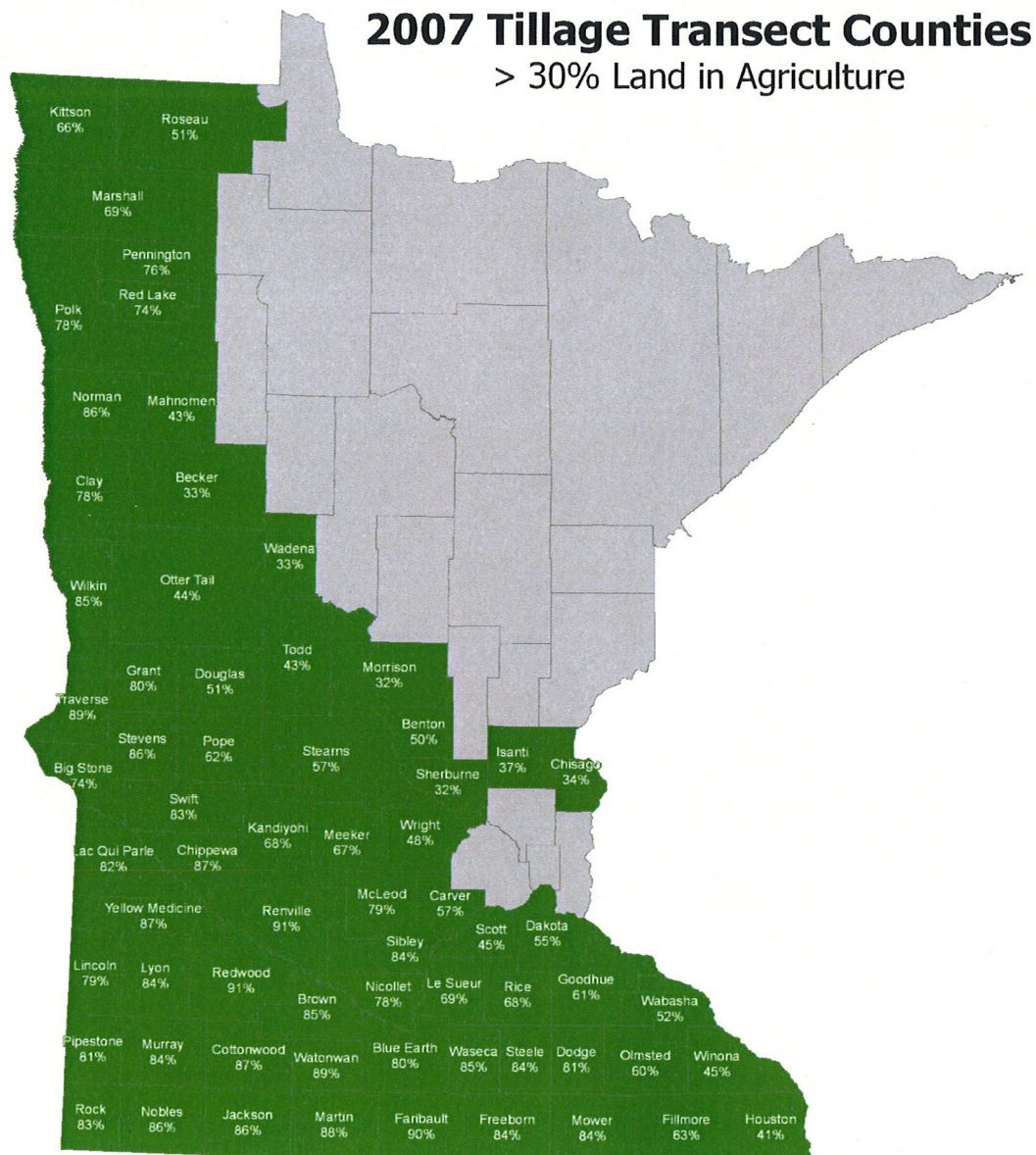


Figure 1. Minnesota counties with at least 30% of their land area in agricultural production are indicated in green. The county name and percentage in crop production are indicated. These counties were included in the 2007 Tillage Transect Survey.

Element 1 - Coordination of Driving Surveys and Testing Procedures

The WRC staff contacted the Soil and Water Conservation Districts (SWCD) in the 67-county area (70 SWCDs) on April 18, 2007 (Exhibit A) and requested their assistance in completing the TTS. An agreement form (Exhibit A) was provided and the WRC completed follow up calls until an individual or team of appropriate viewers was identified in all 70 SWCD areas. In most counties, the SWCD staff completed the survey; however, we also contracted with individuals and watershed organizations to complete some surveys where SWCD staff were unavailable. As part of this initial communication, we also provided each point of contact with a copy of the "Procedures for the 2007 Minnesota Tillage Transect Survey" and a copy of the preferred data sheet (Exhibit B). Each participant was compensated up to \$1,115 for their time and mileage. It was expressed to us that this compensation was appreciated, but in many cases did not fully cover the expenses associated with the data collection.

Element 2 - Data Management

A simple data management structure was formulated based on the preferred data sheet (in Exhibit B). Survey data were delivered to the WRC in a wide array of formats, ranging from raw data sheets to individualized spreadsheet formats. Management of the survey data was a much greater effort than anticipated. Although a procedures guide was provided, the interpretation of the guide varied. Likewise, several tillage categories used in the survey were difficult to understand and interpreted broadly. These issues were discussed with the CTIC staff and clarifications were relayed to the appropriate Minnesota survey participants. Regardless of these efforts, data variability was problematic, and as the results will suggest later in this document, viewer discretion may raise questions about the reliability of some data sets.

As data arrived at the WRC, each data set was evaluated to determine the following:

- 1) Did the survey follow an established route, or is this a new route?
- 2) Was a sufficient number of sites used in the evaluation?
- 3) For each data point, can we determine its geographic location?
- 4) For each data point, can we verify which side of the road was viewed?
- 5) Were the appropriate crop description categories used?
- 6) Was a tillage/residue category provided for each data point?

Although these questions appear straight forward, verification of data points on the map, and securing sufficient information to know which side of the road each point represented, proved to be challenging for many survey areas. The issue appeared to be related to protocol used for previous surveys, where the exact location of each observation point was not important, and survey results were simply lumped to provide a summation of tillage/residue data for each county. Our approach demanded more data detail, which some staff may have misunderstood. In addition, there were discrepancies in how some crops were listed, particularly when it came to areas where pasture, farmsteads, and conservation lands were present.

Data provided in electronic format were integrated into the full data base. Survey data provided as hard copies were entered into the data base and checked twice for accuracy. The entire data base was then checked to ensure that all format issues and errors that had previously been flagged were addressed. The WRC staff and students did the best they could to correct all data problems; however, some data were unrecoverable and had to be deleted. Approximately 0.5% of the data were too problematic and had to be eliminated. This data set includes sufficient data for each of the survey observation areas; however, finding appropriate observation points has become challenging in areas experiencing urban sprawl.

Data were provided to CTIC for the national Crop Residue Management database. We worked with CTIC to produce summary reports of the 2007 data and to harvest all pre-2007 reports for use in our compilation. CTIC software is set up to run standard reports, and this was certainly the most efficient mechanism available to us to report results out; however, coordination of this effort was time consuming and added to the delays associated with the project. The 2007 raw data base will be provided to BWSR and will be available through the Minnesota River Basin Data Center at the WRC (see Element 4).

Element 3 – Driving Route and Data Collection Point GIS Layer Development

Utilizing the data points provided by each survey participant, a GIS layer containing all of the data points was developed. Consistent with the survey data discrepancies and format issues noted above, observation point data were challenging. The best quality data were provided by the participants that collected GPS coordinates for each observation point on the road. Other participants provided us with a map that had corresponding observation point ID on the data sheets. Hard copy observation points were manually entered into the GIS data base. As described above, there were a few survey areas where insufficient detail was initially provided to identify the geographic location for some or all data points. The WRC staff worked with the participants in these areas to verify locations and secure data that facilitated completion of the GIS layer.

As a result of obtaining the 2007 TTS data, we now have a permanent record of the 2007 driving routes and observation points (Figure 2) for each county. Two significant challenges in managing these points were 1) that nearly all of the points included two observations – a right and a left and 2) each point had to be linked to its appropriate observation in the survey data base. WRC staff and students separated each observation point into two data points to correspond with the side of the road where the observation was made (Figure 2). This process involved point-by-point assessment of 42,027 observations across the 67-county area. Each point was offset 330 feet to the appropriate side of the road from the road location and then linked to its appropriate observation in the data base – thereby allowing residue data to be incorporated into various GIS assessments. The GIS layer containing the data is available and will be provided to the BWSR GIS staff and made available on the web site.

Minnesota Tillage Transect Survey 2007 Breakdown by County

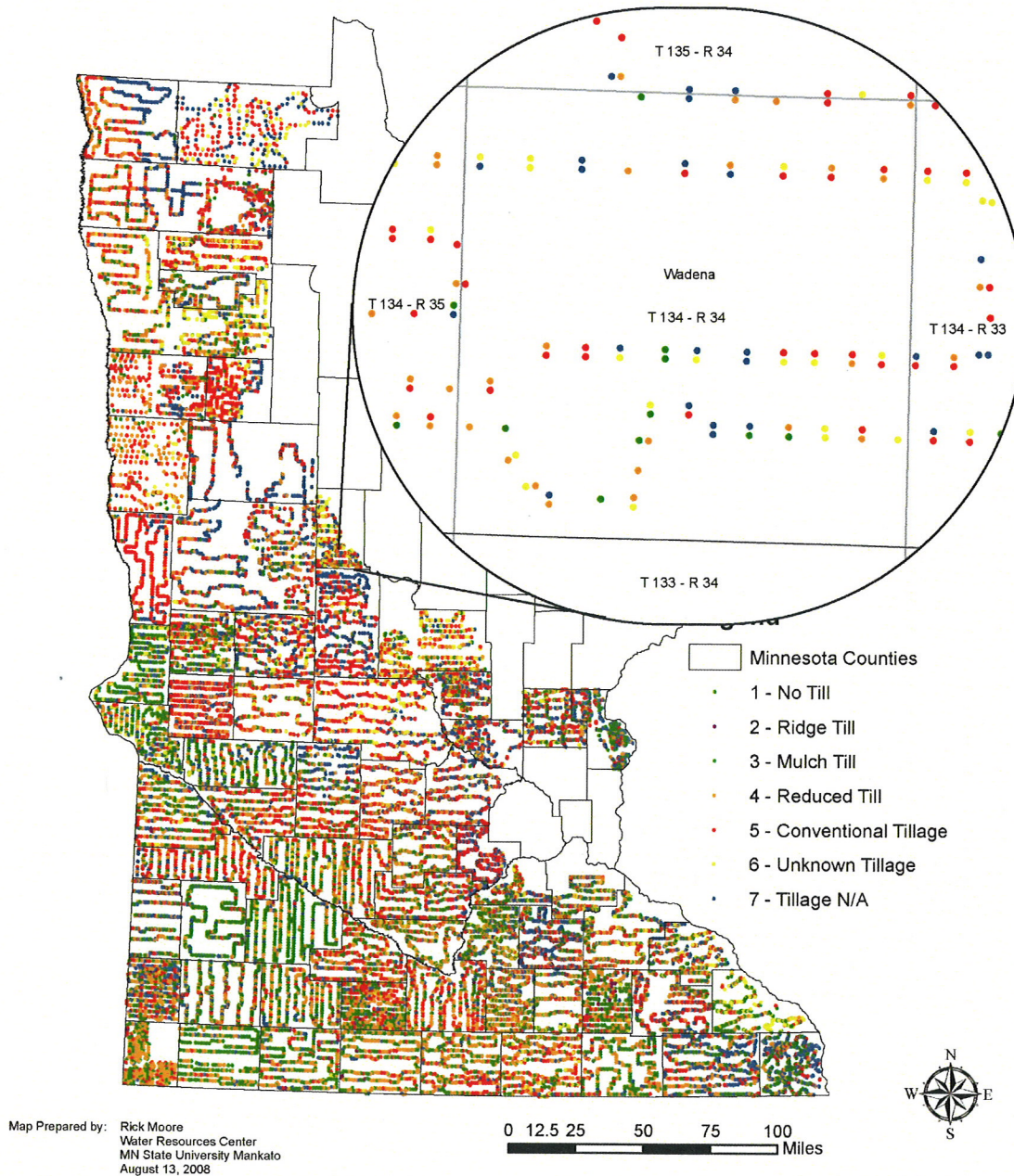


Figure 2. Map of Minnesota showing the GIS layer containing the routes used in the 2007 tillage transect survey. Due to scale limitations, the individual data points cannot be viewed; however, an inset of a township demonstrating the presence of multiple data points along the routes is included. The color scheme highlights the various tillage practices used.

Element 4 – Web Site Design

Although residue survey data are available through CTIC, it is often difficult to access and requires passwords. As part of this project, we developed a web-capable compilation of all the available tillage/residue survey reports from 1989 to 2007. This clearing house of Minnesota residue survey summary reports is available on the Minnesota River Basin Data Center web site (see link below). The site is designed in a user-friendly format and can be readily accessed by the participants and other interested parties. The WRC explored the potential of using an online data entry portal, and CTIC has such a mechanism for summary data. Rick Moore, the WRC GIS specialist will be addressing future data entry possibilities as part of our further evaluation regarding residue and tillage surveys in Minnesota.

The tillage data and associated links can be viewed at the address below:
<http://mrbdc.mnsu.edu/transect/minnesotamn.htm>

Element 5 – Assessment and Reporting

The 2007 TTS data were summarized by county and major watershed unit. For the sake of clarity, residue data are reported in the summary reports and the figures as:

- ◆ Conservation Tillage (>30% residue),
- ◆ Reduced Tillage (15-30% residue),
- ◆ Conventional Tillage (<15% residue) – *also referred to as “Intensive Tillage” on some reports*, and
- ◆ Tillage Type Unknown or Unavailable.

The 2007 statewide and individual county results are reported in two ways:

- ◆ 8-Crop Summary and
- ◆ 22-Crop Summary

Major watershed data are also provided, but in the 8-crop format only.

Statewide Results

The 8-Crop Summary combines crops with lower total planted acres into general categories (Exhibit C). For example, in the 22-Crop Summary, barley, oats, rice, and spring wheat are listed separately; however, in the 8-Crop Summary, these are combined under “Small Grain (Spring-Seeded).” Significant crops, such as soybeans and corn, are listed individually in both reports. The total planted acres data were obtained from the Natural Resource Conservation Service and the U.S. Department of Agriculture.

The statewide survey results indicated that 35.1% of the planted acres were in some form of conservation tillage and had greater than 30% residue cover in the spring of 2007 (Tables 1 and 2). Compiled results also indicated that 33.0% of the land was in reduced

2007 Minnesota State Summary

Table 1*

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till ¹ (15-30% residue)	Intensive-Till ² (0-15% residue)
Corn ³	8,260,071	168,778	38,941	1,848,572	2,056,291	2,985,940	3,217,840
Small Grain (Spring-Seeded)	680,788	2,115	0	22,838	24,953	543,508	112,327
Small Grain (Fall Seeded)	15,664	1,513	0	0	1,513	5,348	8,803
Soybeans (Full Season)	6,126,273	481,855	97,716	2,888,135	3,467,706	1,454,871	1,203,696
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	813,535	18,562	n/a	103,082	121,644	238,135	453,756
Other Crops ⁵	814,443	3,374	406	186,759	190,539	293,920	329,984
Total Planted Acres	16,710,774	676,197	137,063	5,049,386	5,862,646	5,521,722	5,326,406
Newly Established Permanent Pasture	25,054	5,244	n/a	2,230	7,474	12,036	5,544
Fallow	34,027	2,989	n/a	6,054	9,043	2,325	22,659
Conservation Reserve Program	1,802,769						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till ¹ (15-30% residue)	Intensive-Till ² (0-15% residue)
Corn ³	8,260,071	2.0%	0.5%	22.4%	24.9%	36.1%	39.0%
Small Grain (Spring-Seeded)	680,788	0.3%	0.0%	3.4%	3.7%	79.8%	16.5%
Small Grain (Fall Seeded)	15,664	9.7%	0.0%	0.0%	9.7%	34.1%	56.2%
Soybeans (Full Season)	6,126,273	7.9%	1.6%	47.1%	56.6%	23.7%	19.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	813,535	2.3%	n/a	12.7%	15.0%	29.3%	55.8%
Other Crops ⁵	814,443	0.4%	0.0%	22.9%	23.4%	36.1%	40.5%
Total Planted Acres	16,710,774	4.0%	0.8%	30.2%	35.1%	33.0%	31.9%
Newly Established Permanent Pasture	25,054	20.9%	n/a	8.9%	29.8%	48.0%	22.1%
Fallow	34,027	8.8%	n/a	17.8%	26.6%	6.8%	66.6%

* Summary compiled using 67 counties that submitted CRM data in 2007

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

*Table 1. The 8-crop Summary for the 2007 Tillage Transect Survey for 67 counties in Minnesota. The total planted acres and proportions by tillage type are noted.

Table 2*

2007 Tillage Transect Survey - Minnesota

Annual Crop	Crop Acres Total Acres	Conservation Tillage (greater than 30% residue)				Total Conservation Tillage				Other Tillage Practices (15-30% residue) Reduced-Till				(0-15% residue) Intensive-Till			
		No-Till		Ridge-Till		Mulch-Till		Acres	Pcnt	Acres	Pcnt	Acres	Pcnt	Acres	Pcnt	Acres	Pcnt
		Acres	Pcnt	Acres	Pcnt	Acres	Pcnt										
Barley	57,037	0	0%	0	0%	7,205	13%	7,205	13%	13,611	24%	36,221	64%				
Beans	184,592	2,563	1%	406	0%	49,084	27%	52,053	28%	55,900	30%	76,639	42%				
Canola	19,556	0	0%	0	0%	171	1%	171	1%	628	3%	18,757	96%				
Corn ¹	8,260,071	168,778	2%	38,941	0%	1,848,572	22%	2,056,291	25%	2,985,940	36%	3,217,840	39%				
Cotton	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
Forage Crops ²	813,535	18,562	2%	n/a	n/a	103,082	13%	121,644	15%	238,135	29%	453,756	56%				
Oats	128,623	2,115	2%	0	0%	15,633	12%	17,748	14%	34,769	27%	76,106	59%				
Peanuts	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
Potatoes	35,890	0	0%	0	0%	0	0%	0	0%	5,667	16%	30,223	84%				
Rice	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
Rye	12,781	1,513	12%	0	0%	0	0%	1,513	12%	2,465	19%	8,803	69%				
Sorghum ¹	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
Soybeans (FS)	6,126,273	481,855	8%	97,716	2%	2,888,135	47%	3,467,706	57%	1,454,871	24%	1,203,696	20%				
Soybeans (DC)	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
Sugar Beets	481,788	811	0%	0	0%	128,822	27%	129,633	27%	203,731	42%	148,424	31%				
Sugarcane	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
Sunflowers	89,765	0	0%	0	0%	8,670	10%	8,670	10%	27,976	31%	53,119	59%				
Tobacco	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
Other Crops ³	2,852	0	0%	0	0%	12	0%	12	0%	18	1%	2,822	99%				
Spring Wheat	495,128	0	0%	0	0%	0	0%	0	0%	495,128	100%	0	0%				
Winter Wheat	2,883	0	0%	0	0%	0	0%	0	0%	2,883	100%	0	0%				
Total Acres	16,710,774	676,197	4%	137,063	1%	5,049,386	30%	5,862,646	35%	5,521,722	33%	5,326,406	32%				
Newly Est.																	
Perm. Pasture	25,054	5,244	21%	n/a	n/a	2,230	9%	7,474	30%	12,036	48%	5,544	22%				
Fallow	34,027	2,989	9%	n/a	n/a	6,054	18%	9,043	27%	2,325	7%	22,659	67%				
CRP	1,802,769																

¹ Includes Full Season and Double Cropped.² Forage Crops reported in seeding year only.³ Includes other vegetables.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

Note: State total calculated using only the data collected from the 67 counties that reported in 2007.

*Table 2. The 22-crop Summary for the Tillage Transect Survey for 67 Minnesota Counties. The total planted acres and proportions by tillage type are noted.

tillage (15-30% residue), and 31.9% were under intensive, or conventional tillage (<15% residue; Tables 1 and 2). It should be noted that for the purposes of this report, the definition of “statewide” is the 67-county area denoted in Figure 1. In the 67-county primary agricultural area in 2007, there were 16,710,774 acres of land in crop production. The total planted acres for the state was 17,115,443, indicating that only 404,669 acres (2.36% of the total cropland in Minnesota in 2007) were not included. Given that so many of the 22-crop categories for the survey are not present in Minnesota, or present in very low acres, the 8-crop summary report is likely more useful for discussion purposes. County-by-county results are available on the website and in Exhibit D in the same format as the statewide reports in Tables 1 and 2.

For the sake of quick comparison, Figures 3 and 4 were developed to facilitate an overview of tillage practices in Minnesota since 1989. The overall proportion of crop lands under conservation tillage practices has been increasing since 1989 (Figure 3). In 1989, 18.1% of our production lands had >30% residue in the spring, as compared with 35.1% of the productive lands in 2007. Conventional, or intensive tillage, lands with <15% crop residue has correspondingly decreased from a high of 54.9% in 1989 to 31.9% in 2007 (Figure 3).

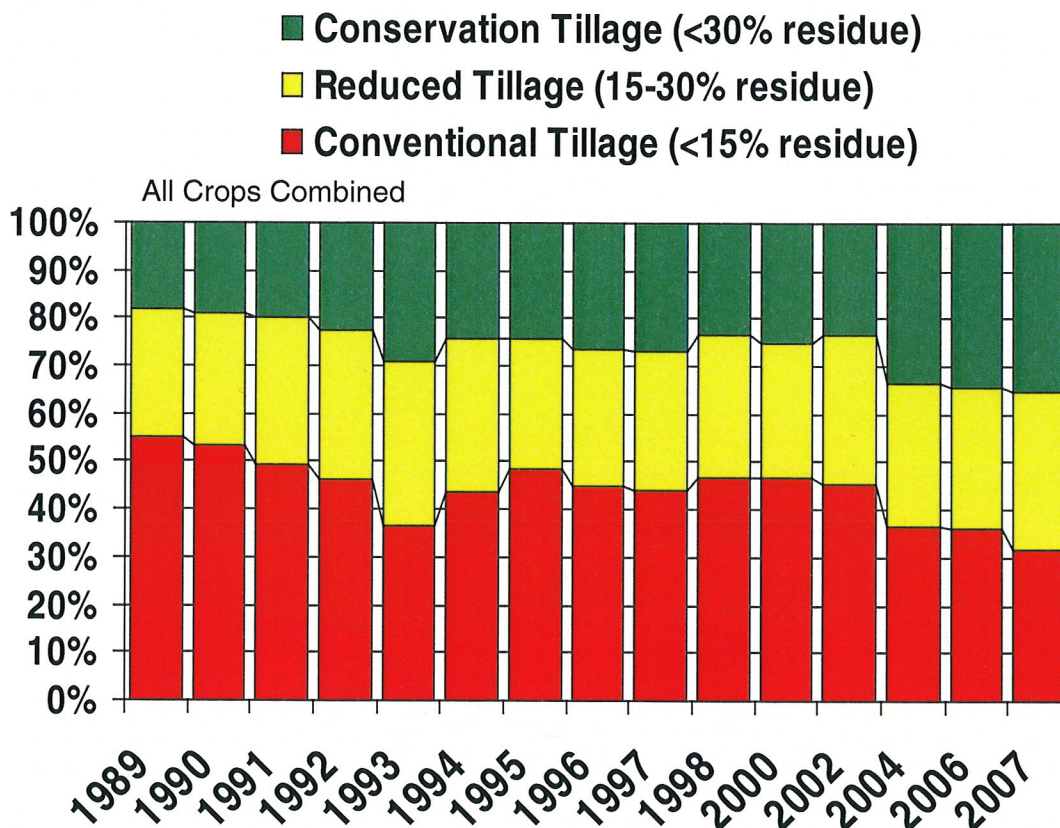


Figure 3. Estimated tillage practice proportions (%), based on residue cover surveys, from 1989 to 2007 for 67 counties in Minnesota. Not all 67 counties were surveyed each year; therefore, in years where some counties may not have been surveyed, averages of other counties were applied to all planted acres in the 67-county area.

Although statewide trends were apparent in residue management practices when considering all crop types combined, a breakdown of three primary crop types revealed that residue management trends differed by crop type. We assessed the residue levels as a result of tillage practices for corn, full-season soybeans, and spring-seeded small grains, as these crops combined for at least 89% of the total planted acres in Minnesota each survey year since 1989 (Table 3). Conservation tillage and conventional tillage on corn did not follow the all-crops combined trend. Conservation tillage (>30% residue) peaked on corn lands in 1993 (27.2%) and was only observed on 14.2% of corn lands in 2002 (Figure 4). The lowest proportion of corn production lands under conventional tillage was recorded in 2007 at 39%; however, peak conventional tillage was observed in 2000 (56.7%). Reduced tillage (15-30% residue) practices on corn lands improved from 23.6% in 1989 to 36.1% in 2007 (Figure 4).

Soybeans in Minnesota, for many practical reasons, appeared to be a driving force in residue management improvements. Conventional tillage of soybeans decreased from 51.3% in 1989 to 19.6% in 2007 (Figure 4). Reduced tillage practices, although still important in Minnesota, decreased from 33.3% in 1992 to 23.7% in 2007. It appeared that residue management changes in soybean lands was a substantive shift away from conventional and reduced tillage toward conservation tillage practices. Conservation tillage shifted from 20.2% of soybean acres in 1989 to 56.6% in 2007 (Figure 4).

Small grain residue, as a nature of fine materials that often cannot reach >30% residue cover, was dominated by “reduced” tillage practices in 2007. Conservation tillage resulting in fields with >30% residue peaked on small grain acres in 1993 at

Table 3. Total planted acres in the 67-county study area during each tillage survey year from 1989 to 2007. For each year, the total corn, full-season soybean, and spring-seeded small grain totals are reported. For each crop type and year, the proportion (%) of the total planted acres for the 67-county study area are noted, along with the combined proportion of these three crop types.

Survey Year	Corn Acres*	Corn % of total	Soybean Acres*	Soybean % of total	Small Grain Acres*	Small Grain % of total	Combined % of planted acres
2007	8.3	50	6.1	37	0.7	5	92
2006	7.3	42	7.1	41	2.0	12	95
2004	7.2	41	7.1	41	2.0	12	94
2002	6.8	39	7.0	40	2.3	13	92
2000	7.0	39	6.9	39	2.4	14	92
1998	7.1	39	6.8	37	2.9	16	92
1997	6.8	37	6.7	36	3.3	18	91
1996	7.0	39	5.9	33	3.4	19	91
1995	6.4	37	5.6	32	3.4	20	89
1994	6.6	36	5.7	32	3.9	22	90
1993	6.0	37	5.1	32	4.2	26	95
1992	6.6	38	5.3	31	4.0	23	92
1991	6.0	35	5.6	32	4.2	24	91
1990	6.3	36	5.0	29	4.7	27	92
1989	6.1	36	5.2	30	4.6	27	93

*Values represent millions of acres planted in the 67-county study area.

24.6%, but had dropped to 11.1% by 2002 and 3.7% in 2007 (Figure 4). Conventional tillage, however, was not inversely related to the proportions of conservation tillage for small grains. Lands with <15% residue peaked in 2002 at 57.8%, but had also dropped to a low of 16.5% in 2007. With conventional tillage and conservation tillage at all time lows for small grains in 2007, the difference was solidly represented in a shift to reduced tillage practices. Reduced tillage practice in spring-seeded small grain lands was recorded at a low of 23.8% in 1990, slowly increasing to 33.3% in 2004, and then jumping to 79.8% in 2007 (Figure 4). Conversations with several small grain farmers and SWCD staff in northwestern Minnesota, where the small grains are most prominent, indicated that the centralization of tillage to reduced-till practices reflects producer desire to work the land, but also the reality of increased fuel costs – therefore, reduced tillage is the compromise.

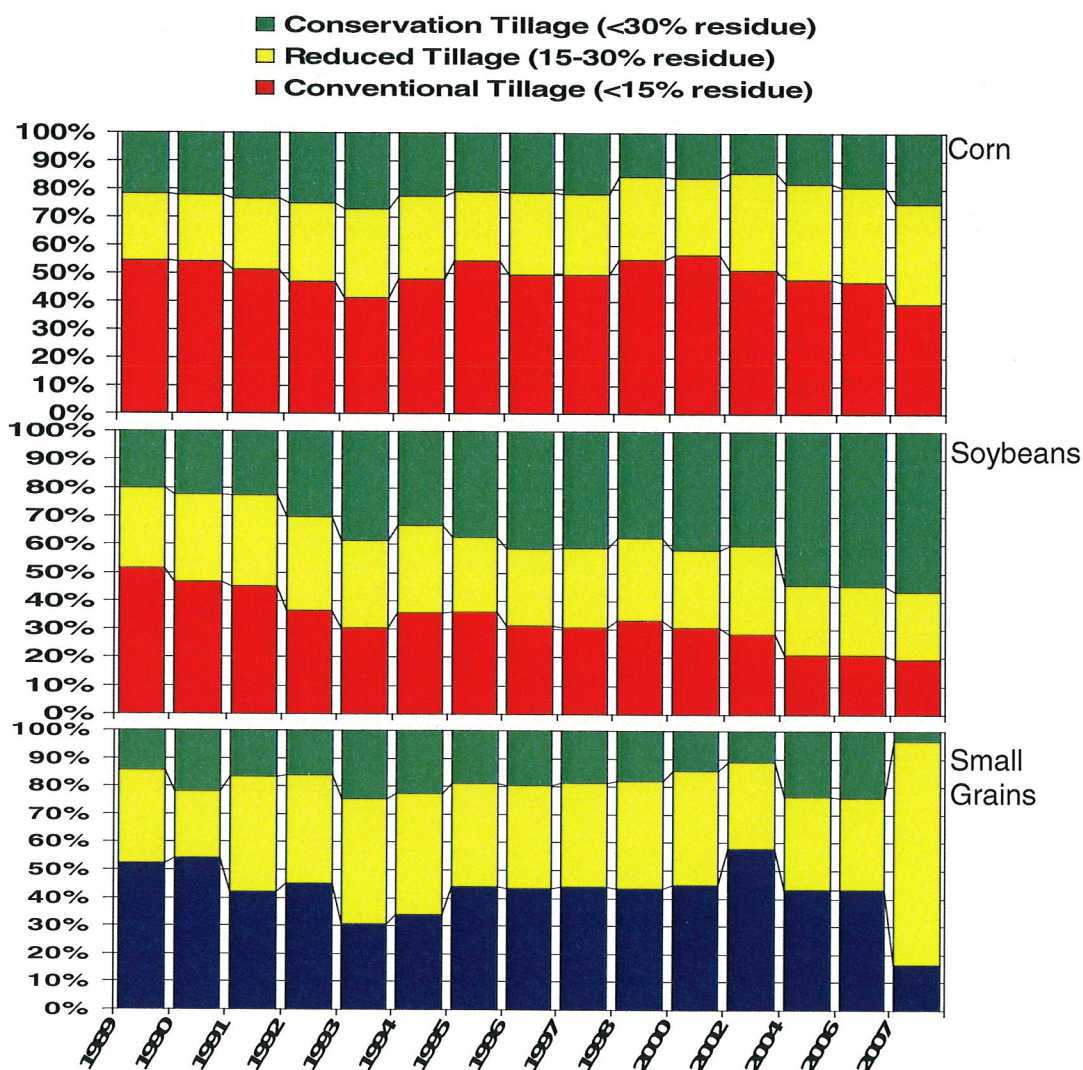


Figure 4. Estimated tillage practice proportions (%) for corn, full-season soybeans, and spring-seeded small grains, based on residue cover surveys from 1989 to 2007 for 67 counties in Minnesota. Not all 67 counties were surveyed each year; therefore, in years where some counties may not have been surveyed, averages of other counties were applied to all planted acres in the 67-county area.

County Results

The individual county results of the 2007 TTS are reported using the same format as the statewide reports. Summaries of the 8-Crop and 22-Crop results are available for each county on the website and attached to this report (Exhibit D). To summarize county results, we tabulated some basic data, but did not bring individualized crop type data forward. An overview of the data indicated that there were some substantial county-by-county differences in residue management; however, the differences in some cases are so stark, that it raises the viewer procedures to question. For example, in an area of the western Minnesota River basin, several counties with similar farming practices (based on discussions with local watershed officials, producers, and government staff) varied substantially in tillage practice reports. Viewers could be consistently over- or underestimating residue cover, as tillage contrasts at county lines were apparent. If we consider the counties of Redwood, Lyon, Yellow Medicine, Lincoln, and Swift, their proportion of planted acres, by county, in conservation tillage ranged from 20 to 74% (Table 4). It is difficult to rationalize these results, and viewer subjectivity is a likely cause; however, differential outreach practices, active cooperative agreements, and local producer dedication are possible.

We did not calculate county-by-county trends from 1989 to 2007, but could do so for anyone that desired to know more. We tried to focus more on the GIS layer, which is providing a great opportunity to evaluate tillage and residue data from other perspectives, such as watersheds.

Watershed Results

For the sake of discussion, we prepared a major watershed unit map to demonstrate differences in residue cover and tillage practices based on natural geographic divisions (Figure 6). Likewise, we developed a similar map for the basins present in Minnesota (Figure 7). Summary reports by major watershed are attached to this report in Exhibit E and can be found on the website. In contrast to the county reports, we could not report the total planted acres by watershed, as the data for planted acres were summarized by county and could not be split out by watershed. Therefore, the reports include the total number of observations for each tillage practice made by crop type and the proportions in which each was present. Please note that the reports in Exhibit E only include observations where a tillage practice could be identified, so the total points will differ than those reported in Table 5.

Assessing data by watershed will help determine if coverage needs are present in any portions of the state for future surveys, and helps eliminate some bias that might be represented by county survey boundaries. It is the belief of the authors that the watershed summaries represent a very good estimation of residue and tillage practices for most watersheds – greater sample size done by multiple viewers.

Watershed-based results indicated some gradients of residue and tillage practices across the state. In general conventional tillage increased from south to north. A typical watershed in northwestern Minnesota is likely to have <20% of the planted acres in conservation tillage, as compared to typically >40% for areas in the southern part of the

Minnesota Tillage Transect Survey 2007 Breakdown by County

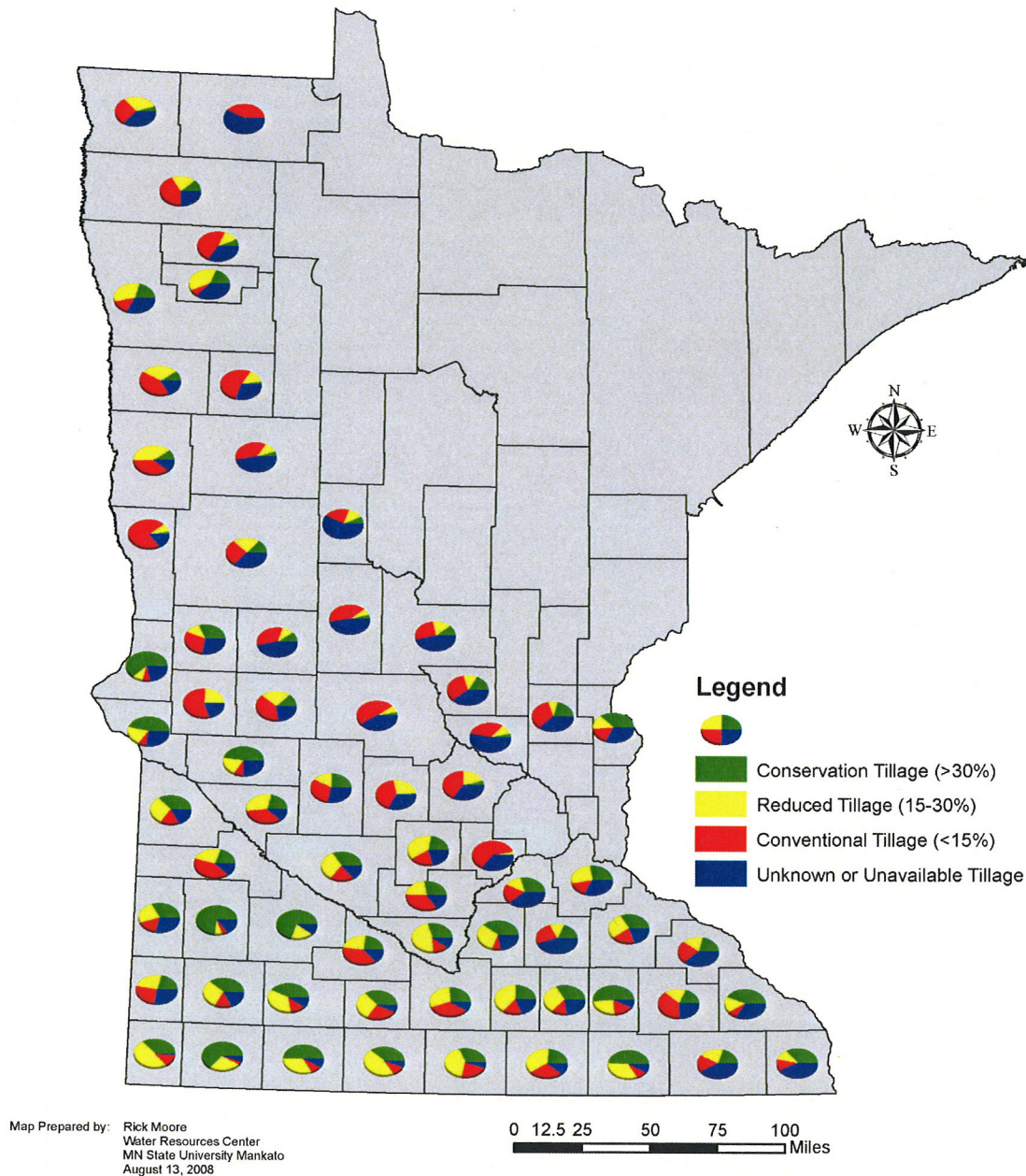


Figure 5. Tillage practice summary, based on residue cover survey results, for 67 counties in Minnesota from spring of 2007. Associated data can be found in Table 4.

Table 4. Sample number (number of observations) made for each county in the 2007 tillage transect survey. The proportion of the total observation points are indicated for sites with >30% residue (% Conservation), 15-30% residue (% Reduced), <15% residue (% Conventional), and unknown or unavailable tillage practices (% Unknown). Unknown tillage examples might include conservation lands, pasture, or developments.

County	Total Observations	% Conservation	% Reduced	% Conventional	% Unknown
Becker	600	6	10	37	47
Benton	646	16	13	31	39
Big Stone	518	47	19	7	27
Blue Earth	656	26	29	36	9
Brown	516	23	25	39	13
Carver	546	1	4	61	35
Chippewa	492	21	30	37	12
Chisago	682	38	13	16	33
Clay	462	10	40	39	11
Cottonwood	504	43	34	13	10
Dakota	490	28	26	15	32
Dodge	522	52	24	17	7
Douglas	680	10	10	33	46
Faribault	604	32	39	24	5
Fillmore	764	21	21	16	42
Freeborn	673	24	35	30	11
Goodhue	682	34	26	21	20
Grant	676	32	11	29	27
Houston	908	36	11	10	43
Isanti	684	21	9	33	38
Jackson	528	50	33	9	8
Kandiyohi	652	25	17	29	29
Kittson	590	5	31	28	36
Lac Qui Parle	622	38	28	18	17
Le Sueur	844	40	30	8	23
Lincoln	482	33	22	17	28
Lyon	574	74	7	5	14
Mahnomen	470	3	13	54	30
Marshall	928	11	23	41	25
Martin	522	39	46	10	6
McLeod	698	23	36	21	20
Meeker	782	2	26	40	32
Morrison	650	11	17	26	46
Mower	462	49	34	8	8
Murray	744	39	28	16	17
Nicollet	538	30	46	14	10
Nobles	468	63	29	3	5
Norman	459	10	32	41	17
Olmsted	706	19	20	37	24
Otter Tail	1038	13	24	26	37
Pennington	598	7	12	47	34
Pipestone	772	21	26	25	28
Polk	1020	21	33	14	32

Table 4 Continued

County	Total Observations	% Conservation	% Reduced	% Conventional	% Unknown
Pope	520	13	27	38	23
Red Lake	482	19	38	6	37
Redwood	594	69	21	1	10
Renville	720	34	30	22	13
Rice	924	19	14	22	45
Rock	500	37	49	12	1
Roseau	480	1	0	42	57
Scott	450	29	14	18	39
Sherburne	578	4	10	33	53
Sibley	518	27	22	36	15
Stearns	766	3	7	49	41
Steele	526	34	29	14	23
Stevens	910	1	24	57	19
Swift	566	48	18	9	25
Todd	780	4	7	42	47
Traverse	487	61	10	7	22
Wabasha	620	22	18	21	39
Wadena	492	7	13	23	57
Waseca	922	25	39	17	19
Watonwan	604	37	28	28	7
Wilkin	460	3	8	75	15
Winona	460	44	14	8	34
Wright	674	4	21	40	35
Yellow Medicine	544	20	26	42	12

state (Table 5). There are a wide range of potential relationships as to why this is, including soil and crop types; however, this was outside of the scope of this study.

As for the basins in Minnesota, there were some regional differences. For example, the Des Moines River Basin had 45% of its planted acres in conservation tillage, whereas, the Mississippi Headwaters Basin was only 10% (Table 6). The watershed assessments did not include crop type assessment, and as we will discuss later, the impacts of the TTS are strongly influenced by what was planted. Therefore, additional evaluations and assessments need to be completed.

Minnesota Tillage Transect Survey 2007 Breakdown by Watershed

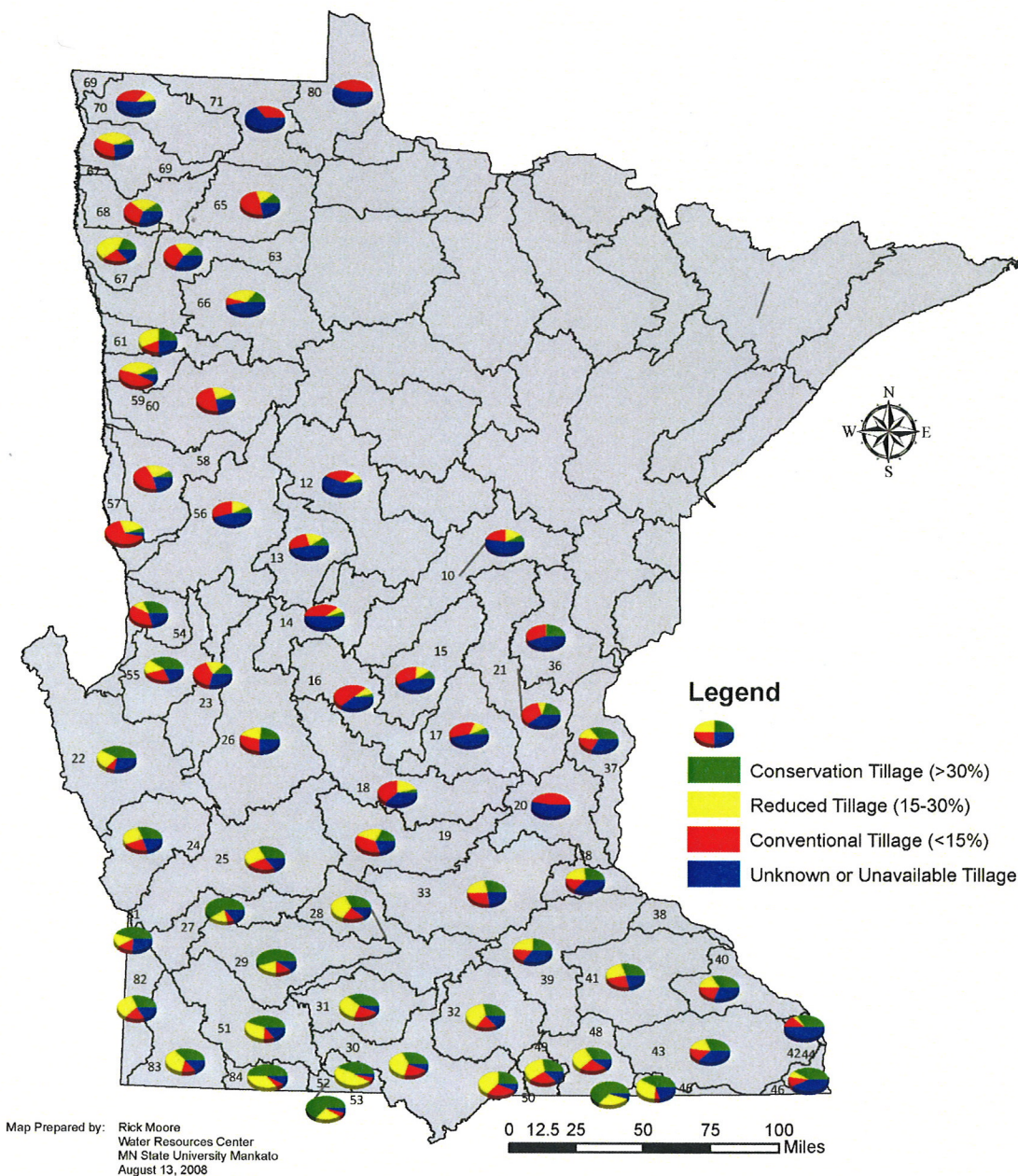


Figure 6. Tillage practices summary, based on residue cover survey results, for the major watersheds in Minnesota from spring of 2007. Associated data can be found in Table 5.

Table 5. Sample number (number of observations) made for each major watershed in the 2007 tillage transect survey. The proportion of the total observation points are indicated for sites with >30% residue (% Conservation), 15-30% residue (% Reduced), <15% residue (% Conventional), and unknown or unavailable tillage practices (% Unknown). Unknown tillage examples might include conservation lands, pasture, or developments.

Major Watershed #	Total Observations	% Conservation	% Reduced	% Conventional	% Unknown
10	293	8	17	24	52
12	359	4	9	30	57
13	777	10	18	25	47
14	668	6	7	38	50
15	728	10	13	33	44
16	678	4	9	49	38
17	1293	8	11	34	46
18	1386	5	21	37	38
19	1482	19	26	35	20
20	17	0	0	47	53
21	701	21	8	32	39
22	668	41	22	9	28
23	1007	14	19	39	28
24	619	32	24	24	20
25	1605	32	25	28	15
26	1647	24	22	29	25
27	572	59	19	7	15
28	1155	32	34	22	12
29	1034	55	21	15	10
30	938	33	38	23	6
31	964	38	32	24	6
32	1563	29	36	21	14
33	2099	28	23	26	23
36	20	25	0	30	45
37	754	35	14	19	33
38	482	27	22	14	37
39	2012	25	23	17	35
40	503	33	17	19	30
41	1637	30	23	25	22
42	48	33	4	13	50
43	1744	31	17	15	37
44	281	41	7	10	42
46	194	41	33	5	21
47	19	63	32	0	5
48	567	33	30	28	10
49	205	28	32	27	13
50	66	26	38	29	8
51	1043	45	29	11	15
52	62	65	26	5	5
53	144	43	49	5	3
54	493	31	10	37	21
55	894	40	15	26	19
56	742	8	17	30	45

Table 5 Continued

Major Watershed #	Total Observations	% Conservation	% Reduced	% Conventional	% Unknown
57	217	5	25	66	4
58	567	7	26	46	21
59	173	8	37	46	9
60	934	8	21	49	22
61	316	25	32	18	24
63	827	12	21	33	33
65	507	12	17	48	22
66	667	15	30	8	47
67	280	19	42	26	14
68	348	11	27	32	30
69	451	6	37	33	24
70	433	3	11	34	51
71	275	1	1	33	65
80	42	0	0	45	55
81	27	44	15	15	26
82	735	31	32	20	17
83	848	36	35	14	14
84	215	50	36	6	8

Minnesota Tillage Transect Survey 2007 Breakdown by Major Watersheds

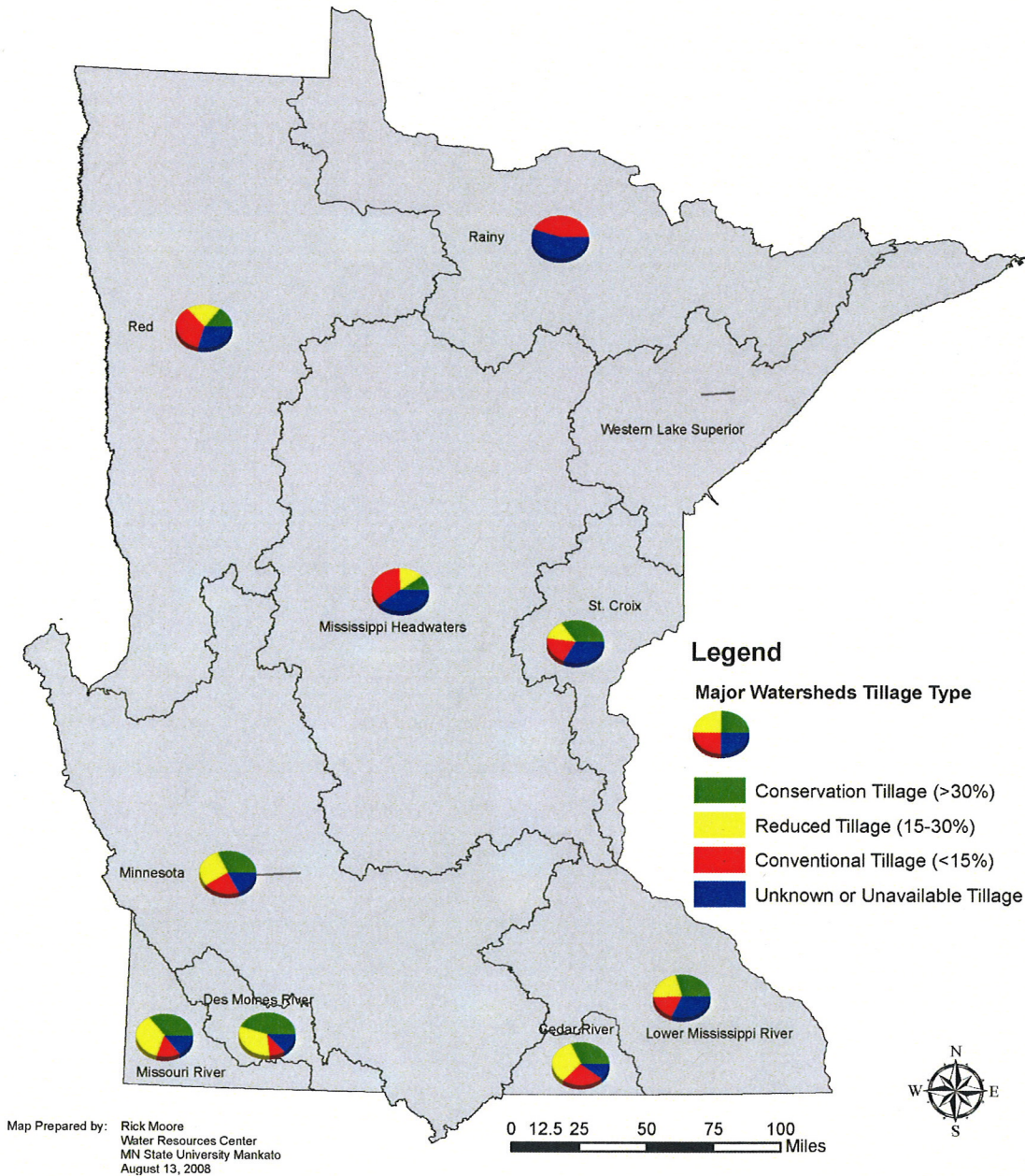


Figure 7. Tillage practices summary, based on residue cover survey results, for the primary watersheds in Minnesota from spring of 2007. Associated data can be found in Table 6.

Table 6. Sample number (number of observations) made for each basin in the 2007 tillage transect survey. The proportion of the total observation points are indicated for sites with >30% residue (% Conservation), 15-30% residue (% Reduced), <15% residue (% Conventional), and unknown or unavailable tillage practices (% Unknown). Unknown tillage examples might include conservation lands, pasture, or developments.

BASIN	Total Observations	% Conservation	% Reduced	% Conventional	% Unknown
Cedar River	857	32	31	27	10
Des Moines River	1249	45	31	10	13
Lower Mississippi River	6901	30	21	18	32
Minnesota	13871	32	27	24	17
Mississippi Headwaters	8382	10	15	35	40
Missouri River	1825	36	34	16	14
Rainy	42	0	0	45	55
Red	8124	15	22	34	29
St. Croix	774	35	13	19	33
Western Lake Superior	0	0	0	0	0

Discussion and Recommendations for Future Tillage/Residue Surveys

Completion of the GIS layer for all survey observation points is an important milestone for residue and tillage assessment here in Minnesota. With this layer now available, evaluations based on tillage and residue in watersheds, in relationship to slope, and as a function of soil type are now possible. With that said, however, there are some problems that inhibit us from linking the GIS observation points to pre-2007 data. After visiting with the SWCDs over the past few months, much has been learned about the process and changes of TTS over the years. The original DOS program used in the 1990s, although now old and out of date, provided a good means to capture the data collection part of the survey – including individual data for each observation point. The interim years of 2002, 2004, and 2006 were limited to tabulated data that yielded county summary data, failing to capture individual observation points. Therefore, the GIS layer will be a great tool for data from 2007 onward, and possibly for pre-2002 data, but has no potential to link to the data collected from 2002 to 2006.

The 2007 TTS reintroduced the idea of single point data and that the information collected at that specific point was valuable. The addition of the collection of the route and GPS locations of the points created a record that can be used for future tillage surveys. It is important to have a permanent record of what was done – which had been an issue given the various entities that have completed residue surveys in Minnesota. These data were digitized and integrated for importation into a mapping program. All of 2007 and future data can be mapped to these points and displayed thematically, bringing the utility of these data to new levels. In light of the growing need to provide better data for TMDL development, we believe these data will be very useful in the development of allocations and implementation plans when sediment transport is an issue. In addition, further evaluation of these data may provide important clues about where to target future tillage outreach.

Although the 2007 TTS and the resulting products were deemed a success, there are some substantive issues that should be addressed in future survey efforts:

- 1) Viewer Training – it is our belief that viewer subjectivity strongly influenced the results of the survey in some counties and watersheds. We propose that a requirement of the subcontracts provided to the viewing parties would be completion of a ½ day training session. The session would overview the various crop types, provide opportunities to experience differential residue coverage, and provide insight about the crop categories used in the survey.
- 2) Route Evaluation – although coverage was largely sufficient, there were a number of nuances in the routes that raises questions about the validity. A quick review of Figure 2 highlights the various route patterns, and how county-by-county differences were present. Likewise, if coverage needs to improve on a watershed basis, those needs could also be readily identified.
- 3) Better Inclusion of Crop Type in Assessments – although it is easy to summarize and report the results of these surveys using “all crops combined,” this level of reporting is not as revealing as that of crop-specific details. Likewise, soils react differently based on many factors, including crop type, and therefore a better integrated technique to include some of these factors should be utilized (see #4).
- 4) Incorporation of Soil Loss Models – to create an added value to this work, a significant effort to incorporate soil loss models into the survey process should be completed. A discussion regarding the integration of RUSLE2 and TTS protocol is listed below.
- 5) Survey Intervals – to facilitate #3 above, and to create a mechanism that actually makes the surveys less work, they should be completed annually. When completed annually, we can maintain a running estimate on soil loss and create an electronic worksheet system that will automatically link to each site and the previous year’s crop – helping to remove some of the subjectivity and discrepancy apparent in the 2007 survey.
- 6) Clarification on the “unknown” and “unavailable” categories – these caused significant confusion and were related to most of the data problems we witnessed.

A New Generation of TTS in Minnesota?

As part of a sister project to the 2007 TTS, we completed some research and development of a more comprehensive technique to gather residue data – including mechanisms to streamline data collection and to bring tillage results into immediate use in impaired waters studies, water quality credit trading, BMP evaluations, and targeting conservation efforts.

WinTransect

With the introduction of WinTransect for Windows, created by conservation agencies in Wisconsin, an old DOS program has been updated and integrated with a RUSLE2 soil loss component. WinTransect utilizes data entered into spreadsheets with a very user

friendly process. Each stop (on the screen) comes preformatted to show the left point and right point on the screen. The present and previous crop can be entered but if this is ongoing, the previous crop is already determined. During the initial run of this model format, soil information for each point would need to be entered by hand or imported to yield T and K factors for use in RUSLE2 calculations. Field slope and length can also be entered but previous transects (if done on same route and points) can again yield this information. The initial effort using this process would be a little work intensive; however, once established, the process becomes very easy and efficient. Actual XYZ coordinates can be inputted for each point if needed. Given that this process includes all the components for RUSLE2, completing soil loss calculations over time based on crop rotation, tillage, and conservation practices can be done virtually on the spot. The model also allows the inclusion of other factors, such as the presence of ephemeral erosion.

The program currently produces 3 reports:

- 1) Crop Type Summary,
- 2) RUSLE2 Soil Loss Summary, and
- 3) Tillage Systems Summary.

The program has an option to readily export data to a table format. Direct integration with CTIC and their Crop Residue Management program is being discussed and could possibly be included in future versions. The addition of WinTransect will decrease staff data collection time and provide a mechanism for instant reporting options – no future delays like we experienced with the 2007 data, including automatic linkage to spatial data for mapping, as each point would be unique and could be readily collected annually.

The WRC will provide a demonstration to the BWSR staff and can present the materials to other groups as requested.

Looking Ahead

There are a few basic suggestions we have regarding the next iteration of a residue/tillage survey here in Minnesota. These include, but may not be limited to:

- 1) A certified training program for viewers to better control data subjectivity,
- 2) Development of an annual survey plan, which may include subsampling,
- 3) Development of modified protocol to integrate electronic advances,
- 4) Utilization of a “WinTransect” type of program
- 5) Continuation of a stipend system to help cover the local survey expenses, and
- 6) Nurturing a continued relationship with CTIC, local partners, and watersheds.

The WRC thanks all of the SWCD, watershed partners, and individuals that completed the 2007 surveys. We would also like to thank CTIC for their assistance in summary report preparation, Sarah Duda, Diane Wiley, and the WRC students for coordinating the data collection and contracting process, and to BWSR for funding this project. We look forward to continuing to work on this important effort.

Exhibit A

**Participation Request Letter
And
Subcontract Form**



18 April 2007

«first_name» «last_name»
«address»
«city», MN «zip_code»

Dear «first_name» «last_name»:

Over the past 12 years, crop residue surveys have become an important tool in evaluating program success and land management practices. In the past, tillage transect surveys (TTS) have been coordinated by NRCS and BWSR, with significant assistance from the SWCDs. As part of Minnesota's ongoing push to promote clean water initiatives, TMDL evaluations and implementation, and program efficacy, BWSR has provided funding to the Water Resources Center (WRC) at Minnesota State University, Mankato to coordinate the 2007 TTS. With your help, this important data set can again be collected this spring. Counties with >30% of their total land area in crop production have been selected for the 2007 TTS.

Your SWCD is in a county of interest and we are formally requesting your assistance. My apologies for the late notice, but we sincerely hope that your SWCD can participate. The overview of the process that Greg Larson from BWSR emailed to you earlier this week is quite accurate. The basic steps in this process are laid out below and correspond with the enclosed documents:

1) **2007 Tillage Transect Survey Agreement:** Each SWCD is asked to verify if they will be willing and able to participate. The agreement form should be filled out, signed by an authorized representative, and returned to the WRC in the enclosed SASE **postmarked by May 2, 2007**. If you cannot participate, we ask that you suggest an alternate local entity (e.g., CWP or Watershed District) that could complete the TTS on your behalf. If the form is not returned affirming your participation, alternates are not indicated, and/or alternates are unable to complete the TTS, WRC staff will complete the TTS for you. Your participation is not mandatory, but a guarantee has been made by the WRC to the state of Minnesota that the 67-county area of interest would be completed in 2007 – it is just a matter of who will do the work. It is our strong preference to have knowledgeable local staff lead the TTS. Each SWCD that completes a TTS and provides the routes as requested will receive a stipend of up to \$1,115 for your time and travel.

2) **Procedures for the 2007 Minnesota Tillage Transect Survey:** The protocol for the 2007 TTS largely follows previous procedures used as part of earlier residue management surveys. If you agree to participate in the 2007 TTS, please read the procedures guide carefully and let me know if you have any questions.

3) **2007 Tillage Transect Survey Data Sheet:** Enclosed is a suggested data sheet for use if you are recording your data by hand. If you are entering the data directly into a computer

program or using an alternate format, that is acceptable; however, be sure that all of the information requested on the provided data sheet are included and will be available to the WRC. There are 20 data entry rows on the data sheet and you are asked to collect data at a minimum of 460 points (230 road stops with 1 data point on each side) – thus 23 data sheets. On the data sheets you are asked to provide the following information:

A) *Data Point ID* – this can be any reference to the data collection points that will allow us to match that row of data on the data sheet with a site on the route map or GIS layer. On your routes, you will designate the direction you were driving and sites are to all be assessed on both sides of the road – so observations can be listed as separate ID numbers and noted that way on your map, or as single ID numbers and designated as left or right (see procedures guide).

B) *Crop Description* – From the list of 22 crop types in the procedures guide, determine the type of crop contributing to existing residue cover (i.e., 2006 crop) and the emerging crop planted this year (i.e., 2007 crop). Note both of these in this column of the data sheet, but always list the residue crop first. For more information, refer to the procedures guide.

C) *Tillage Type/Residue Status* – place a checkmark in the column that best describes the cropland status at each data collection site. Refer to the procedures guide for more information.

The WRC will handle data entry and summation on your behalf, thus reducing work load. We will also be generating a statewide tillage transect route GIS layer and completing various evaluations on the data, to include regional and watershed scale assessments. A report on our evaluations will be available later this year.

On behalf of the Board of Water and Soil Resources, the Water Resources Center, CTIC, and other interested parties, I sincerely hope that your SWCD will be able to provide assistance. Your time and consideration are appreciated. Please let me know if you have any questions and we look forward to receiving your TTS agreement form back over the next 7-10 business days.

Regards,

Shannon J. Fisher, Director

Enclosures: 1) 2007 Tillage Transect Survey Agreement Form
 2) Procedures for the 2007 Minnesota Tillage Transect Survey
 3) 2007 Tillage Transect Survey Data Sheet

TILLAGE TRANSECT SURVEY 2007

Please provide the following information, sign and return in the enclosed envelope postmarked by
May 2, 2007.

We agree to participate in the Transect Survey (please check one):

☐

YES

Please provide the following information to assure that proper payment can be made.

Federal ID #

MN State Tax #

Vendor # (state system)

☐

NO

Please suggest an alternate agency who may be able/willing to complete this survey.

Agency: _____

Address: _____

City/State/Zip: _____

Phone: _____

E-Mail: _____

AUTHORIZED

CONTACT: _____

ADDRESS: _____

CITY: _____

STATE/ZIP: _____

E-MAIL: _____

PHONE: _____

FAX: _____

We agree to assist Water Resources Center, MSU Mankato (WRC) and BWSR in the 2007 Tillage Transect Survey. Our organization will complete the survey and submit the specified data to WRC along with an invoice for services provided. Once the data are accepted by WRC, MSU Mankato will pay up to \$1,115.00 to help defray costs involved in obtaining and transmitting the data.

Authorized Contact Signature

Water Resources Center
184 Trafton Science Center South, MSU Mankato
Mankato, MN 56001
diane.wiley@mnsu.edu
507-389-5492 (phone) 507-389-5493 (fax)

Exhibit B

**Procedures for the
2007 Minnesota Tillage Transect Survey
And
2007 Preferred Data Sheet**

Procedures for the 2007 Minnesota Tillage Transect Survey

Prepared by:
Shannon J. Fisher, Director
Water Resources Center and Minnesota River Board
Minnesota State University, Mankato
(507) 389-5492; shannon.fisher@mnsu.edu

This manual represents a modified version of the 2006 *Cropland Roadside Transect Survey: Procedures for Using the Cropland Roadside Transect Survey for Obtaining Tillage/Crop Residue Data*. The original 2006 document was developed by the Conservation Technology Information Center (CTIC) at Purdue University. Permission to modify the document and distribute as part of the 2007 survey in Minnesota was granted by Karen Scanlon, CTIC Director.

Questions can be directed to:

Shannon J. Fisher, Director
WRC and Minnesota River Board
(507) 389-5492; shannon.fisher@mnsu.edu

or

Greg Larson, State Soils Specialist
MN Board of Water and Soil Resources
(651) 297-7029; greg.larson@bwsr.state.mn.us

Procedures for Conducting the 2007 Tillage Transect Survey (TTS)

Why should we conduct a TTS in Minnesota?

Roadside tillage transect surveys (TTS) are designed to gather information on tillage and crop residue management systems. The Conservation Technology Information Center (CTIC) at Purdue University has worked with various organizations across the country to collect crop residue data for more than two decades. CTIC has indicated that counties with a grid road system, that have fields readily visible from the road, where crops are planted in a relatively short period of time, and where conservation tillage is being adopted are the most likely candidates for the completion of a successful TTS.

Crops, soils, and climate interactions dictate to some degree the adoption of high residue systems. It has been shown that in many scenarios, the adoption of conservation tillage practices can dramatically reduce nonpoint pollution, enhance soil quality, and facilitate carbon retention. Some states have found the data so valuable that a TTS has been completed on an annual basis – a practice that Minnesota is hoping to initiate with this 2007 survey. Annual surveys allow conservation entities to track long-term changes in tillage practices in relation to changing weather conditions, educational programs, technological advances, and other social and economic factors. In addition, the presence of continuous no-till and potential for carbon sequestration are becoming increasingly important in some areas. Several Minnesota TMDL implementation plans are also in effect and conservation tillage and residue management are practices of interest to meet pollutant reduction goals.

The purpose of the 2007 Minnesota TTS is fourfold: (1) to provide information that can be used by individual soil and water conservation districts and others in establishing priorities for educational, TMDL, and other programs, (2) to evaluate progress achieved in reaching county, watershed, and statewide goals, (3) to provide accurate data on the status of conservation tillage systems across watersheds in Minnesota, and (4) to develop a statewide GIS tillage transect route layer with geo-referenced data points. The TTS is a versatile tool – helping measure tillage progress locally, on a watershed basis, and over the entire state. The TTS data increases our confidence in program evaluation and allows us to provide solid data to state and national organizations, such as CTIC.

Who is participating in the 2007 Minnesota TTS?

Based on an assessment of recent land use data for all 87 counties of Minnesota, the Minnesota Board of Water and Soil Resources determined that TTS data would be most valuable from counties with a minimum of 30% of their land area in crop production (Figure 1). These 67 counties are all receiving a request to participate in the 2007 TTS, including a small stipend for their assistance.

What is the statistical reliability of the cropland roadside survey method?

Each entity that submits TTS data is part of an important team that is helping their county, watersheds, state, and nation evaluate residue management. When conducted properly, this cropland transect survey procedure provides a high degree of confidence in the data summaries. Users can have 90% or more confidence in the accuracy of the results. This level of reliability translates into data summaries that can help guide various decision-making processes. Several states have used transect data to allocate cost-share funds, develop new resource management goals, and to provide information to the general public about the positive impact of progress on land use trends. In general, few data sources have such a high level of reliability combined with quick data collection!

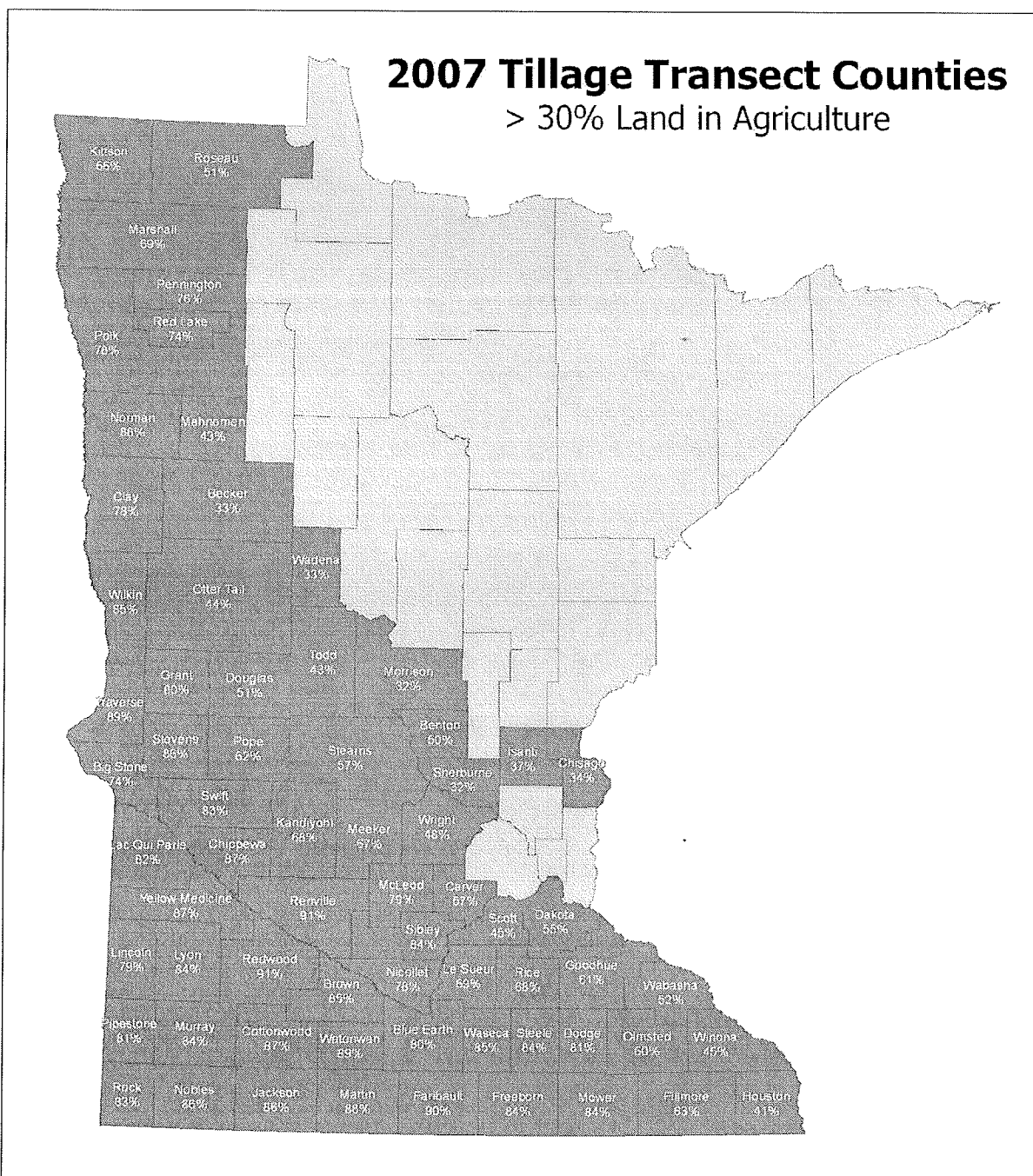


Figure 1. Counties included in the 2007 Tillage Transect Survey in Minnesota. Included for each participating county is the estimated percentage of land area currently in agricultural production.

What crops can be selected for inclusion in the 2007 TTS?

The crop list for the 2007 Minnesota TTS is the same as CTIC has used over the past several surveys and includes 22 crops. Crops should be selected for each data entry point from the following list:

corn	edible beans and peas	sunflowers
soybeans (full season)	barley	sugar beets
soybeans (double-cropped)	canola	sugarcane
cotton	forage crop (seeding year only)	tobacco
spring wheat	peanuts	vegetables and other crops
winter wheat	potatoes	permanent pasture
oats	rice	fallow
grain sorghum	rye	

Important note: Make sure that the correct crops are chosen, as this is one of the most critical pieces of information. For example, do not place dry edible beans in the soybean category or rye in the winter wheat category. It is imperative, however, that you make a crop determination for each data point.

What are the steps in the process?

The following 5 steps outline the basic requirements for completing the 2007 TTS. Alternate protocols are often times acceptable; however, at a minimum, the data collections described in the following steps must be included in the reported data.

Step 1 – Establishing and Marking the Route

The first step in conducting a TTS is to establish a driving route. *Most of the counties in Minnesota already have an established route and those routes should continue to be utilized.*

For those that may not have an established route, a county highway map should be used to draw a route that passes through all areas that are heavily used for crop production. Avoid large urbanized areas, forested land, rangeland, and heavily traveled federal and state highways when possible. Orientation or direction of the route (east to west or north to south) is not significant; however, it should be **at least 110 miles** long. Routes for counties with more than 300,000 cropland acres should pass through townships at least twice, particularly in areas where the land is heavily used for crop production. This avoids large gaps between passes through a county even though the mileage traveled is considerably longer. Routes typically traverse east to west through a county five to eight times (see Figure 2).

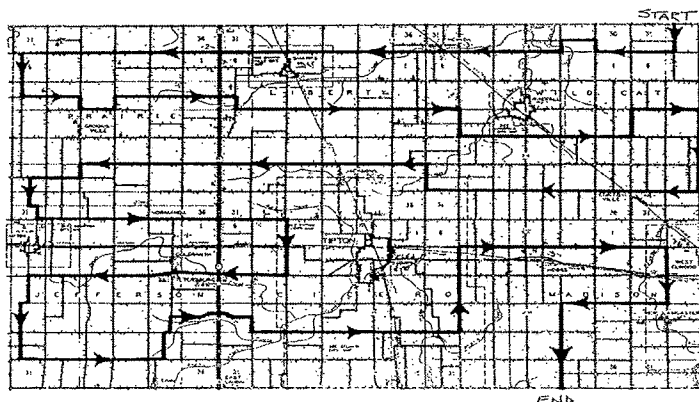


Figure 2. Sample county road transect route for Tipton County, Indiana. Note how the route bypasses towns (such as Tipton, Indiana located in the center of the county). This survey is applicable regardless of the layout of the county, i.e. counties need not be square to provide accurate results with this method.

Step 2 – Establishing the Survey Date and Team

Once the route is established and marked (including the direction to be traveled – note the arrows in Figure 2), schedule a date for conducting the survey. It should be after the majority of the main crops have been planted but before the crop canopy closes or the first row cultivation takes place. Although some fall-planted crops will be present, we will only be conducting a spring/early summer 2007 TTS. The intent is to estimate the tillage systems being used at each data point and which crop that tillage system is associated with (both past and present crops). Conducting the survey after planting, but before canopy closure allows for easy “windshield observations” without stopping at each field.

Because the actual dates for conducting the TTS will depend upon local planting progress, flexibility in scheduling is recommended. For example, the northern half of a large county may have had more rain than the southern half; therefore, a local team may survey the southern half of the county one week and finish the northern half two weeks later. The TTS does not have to be fully completed at one time.

Next, assemble a survey team. It should consist of 2-3 individuals that can complete the entire TTS for your area. Members may include any of the following: SWCD staff, NRCS district or soil conservationists, county Extension agriculture agents, qualified FSA staff, and/or any other qualified person identified by the SWCD, such as a Clean Water Partnership Coordinator or Watershed District representative who can assist in making observations. At least one individual should be very familiar with tillage systems and estimating residue levels. When conducting the survey, the following tasks need to be performed: driver, navigator who marks data collection points on the map, and data recorder. Occasionally someone will need to verify field observations (measuring residue, previous crop, etc...).

Please verify as you are collecting the data points that individual data points on your data sheets readily correspond to site locations marked on your driving route maps or in your GIS layer. This information is going to be utilized for route and data sheet preparation in subsequent years – thereby reducing future workload and enhancing our evaluation capacity...

Step 3 – Collecting the Survey Data

The highway map will aid navigation across the county, especially if there are detours or road changes since the last transect.

For the 2007 TTS, the following information is required at each data point (refer to the data sheet):

1) data point ID, 2) crop description, and 3) tillage practice/residue status. The data sheets are relatively simple; however, as we develop a statewide GIS TTS data layer, the most detailed information you can provide for data point locations will be extremely valuable. A preferred data collection sheet is enclosed with this mailing; however, each county may desire to customize their own data collection sheets or enter the information electronically – again, please note that customized data entry is acceptable as long as the information requested on the enclosed standard data sheet is all available.

For counties with 300,000 cropland acres or less, data should be collected at one-half mile intervals, as indicated by the vehicle odometer. For counties that have between 300,000 and 450,000 cropland acres, a one-mile interval is recommended. For counties with greater than 450,000 acres, a 1.5 to 2.0 mile interval is recommended. To obtain a statistically reliable data set, each county must collect **approximately 460 cropland sites** along your minimum 110-mile route.

Beginning at the start of the route, travel exactly one-half mile and stop. Observe fields on **both sides**, and record the appropriate information on the first data sheet. At each stop, you are actually collecting

data for **two** cropland sites – one on the left and one on the right. Be sure to mark the field location on your route maps. Many use a station number for each stop and then simply refer to each side of the road as left or right (e.g., station 5 would have two cropland sites such as 5L and 5R – this is sufficient, as the route map indicates the direction you are traveling so left and right are distinguishable). Another option would be to use a GPS receiver to mark the field location (preferred). Repeat the procedure at half-mile intervals (or desired interval) until the route is completed (please note suggested intervals above). At each site, record the crop residue type (2006 crop) and the current crop type (2007 crop) under crop description. *For example, if the cropland site has corn residue and was planted to soybeans this year, you would report under “crop description” on the data sheet CORN/SOYBEANS – always putting the residue crop first.*

Important:

- (A) If a data point is a cropland field, but is not planted to a crop on the list above in 2006 (e.g., it is hayland, CRP, etc) in 2006, then record the cover type under crop description and note it as unknown for tillage type.
- (B) If a cropland field is not encountered at the stopping point on one side of the road (e.g., pasture, farmstead, subdivision, etc...), record data only for the side with cropland. For the absent cropland data point, note the land use in the crop description and indicate that the tillage is not applicable (NA).
- (C) Only record data for fields where the tillage type/residue level is obvious. For example, if one is conducting a transect in the spring, it is futile to walk into a winter wheat field to try and determine tillage/residue level. Simply mark that field as unknown for tillage/residue level.
- (D) If no cropland field is encountered on either side of the road, continue driving until cropland is observed on at least one side of the road. Record data and note the change in site on the existing route maps, and then proceed.

As the transect survey continues, the survey team should stop and check field conditions on a regular basis to insure correct estimates are being made for different crop, tillage, and residue conditions. Once the team has calibrated their visual estimates to match actual field conditions, stops can then be made less frequently. Many fields will contain very little residue or high residue levels if the field was no-tilled. Usually only borderline residue levels require closer examination. However, the team should plan to recalibrate their visual estimates especially when entering a region of the county with different soil surface conditions due to changes in moisture, organic matter levels, stoniness, or crops grown.

Crop residue cover levels will be the most important data category to confirm with field measurements. Therefore, use the line-transect method as described in the National Agronomy Manual for confirming percent residue cover. Confirm visual estimates with field measurements in borderline cases. *But remember, never use end rows for field measurements!*

At the end of the route, count the number of cropland sites where data were recorded. If less than 460, randomly extend the route and record data at half-mile intervals until this number is met. *Do not count fields twice if a transect crosses over its previous route.* Be sure to mark the extended route and additional data points on the county highway map.

In counties that are highly urbanized, wooded, etc..., collecting data on 460 cropland sites may not be feasible. In this case, collect as much data as practical. As you complete the transect routes, please also note sites that appear to be in conservation set-aside programs (e.g., CREP, RIM, CRP). Please note conservation acreage in the “Crop Description” column of the data sheet.

Step 4 – Crop Acreage and Percentage Calculation

Data calculations can be completed by the local staff conducting the TTS or raw data can be sent to the WRC and our staff will complete the calculations for you. If you choose to have the WRC complete the calculations, you can skip the rest of step 4 and proceed to step 5.

The number of check marks needs to be summed for each crop/tillage category and then summed for each crop. Dividing the sum in each category by the total for the crop will provide the percentage for each tillage system. (Yes, you will have to count and use your hand calculator.) For example, if there were 36 check marks for no-till corn, 22 for mulch-till corn, 28 for reduced-till corn, and 14 for conventional corn, the sum would be 100. So this county would have 36% no-till corn, 22% mulch-till corn, 28% reduced-till corn, and 14% conventional-till.

In addition to crop and tillage acres being reported, the total number of CRP acres should also be reported. In addition, the total acres planted no-till into a cover crop should be recorded. This is to determine the extent of cover crops usage.

The county crop acreage will need to be adjusted to reflect 2007 crop acres. Sources of information regarding the acres of crops planted for each county are Farm Service Agency (FSA) farmer certification (usually available in mid-August) and/or the State Agricultural Statistics Service. The State Agricultural Statistics Service in most States will release a crop report by crop reporting district on June 30th. This report will be very valuable in estimating the change in crop acreage from the previous year. The National Agricultural Statistics Service (NASS) State home page will also have the previous year's crop acreage by county (double-cropped acres are included in the acreage report). Discussion with government agency partners and local knowledge should not be discounted.

Step 5 – Provision of data to the WRC

Within 2 weeks after completion of the TTS, copies of the raw data sheets along with a route map indicating data collection points should be submitted to the WRC at Minnesota State University, Mankato. If you are utilizing an electronic means to enter data in the field and/or have your routes already digitized into an electronic format (including the data collection points), please send that information as well.

TTS routes in all 67 counties of interest will be digitized and or consolidated (from your GIS files) into a statewide TTS route layer. This layer will be valuable in the assessment of residue status in relationship to watershed management, regional program evaluation, and TMDL assessment.

How should we define the types of tillage?

Tillage systems definitions have been featured in the National Crop Residue Management Survey and adopted by CTIC. These definitions are to be used in this study.

Conservation Tillage:

Conservation tillage includes any tillage and planting system that **covers 30 percent or more** of the soil surface with crop residue, after planting, to reduce soil erosion by water. Where soil erosion by wind is the primary concern, any tillage system that maintains at least 1,000 pounds per acre of flat, small grain residue equivalent on the surface throughout the critical wind erosion period is considered to be in a state of "conservation." The TTS recognizes three types of conservation tillage: 1) no-till/strip-till, 2) ridge-till, and 3) mulch-till.

No-till/strip-till: The soil is left undisturbed from harvest to planting except for strips up to 1/3 of the row width (strips may involve only residue disturbance or may include soil disturbance). Planting or drilling is accomplished using disc openers, coulter(s), row cleaners, in-row chisels or rototillers. Weed control is accomplished primarily with crop protection products. Cultivation may be used for emergency weed control. Other common terms used to describe no-till include direct seeding, slot planting, zero-till, row-till, and slot-till.

No-till/strip-till

- Less than 1/3 of row disturbed
- Greater than 30% residue after planting
- Crop protection products used for weed control

Ridge-till: The soil is left undisturbed from harvest to planting except for strips up to 1/3 of the row width. Planting is completed on the ridge and usually involves the removal of the top of the ridge. Planting is completed with sweeps, disk openers, coulters, or row cleaners. Residue is left on the surface between ridges. Weed control is accomplished with crop protection products (frequently banded) and/or cultivation. Ridges are rebuilt during row cultivation.

Ridge-till

- Less than 1/3 of row disturbed
- Greater than 30% residue after planting
- Top 1-2" of ridge removed at planting
- Crop protection products are usually banded
- Row cultivation is used for weed control and to rebuild ridges

Mulch-till: Full-width tillage that involves one or more tillage trips, disturbs the entire soil surface and is done prior to and/or during planting. Tillage tools such as chisels, field cultivators, disks, sweeps or blades are used. Weed control is accomplished with crop protection products and/or cultivation.

Mulch-till

- Entire field is tilled
- Greater than 30% residue after planting
- Usually one to 3 tillage trips
- Chisel plow, disk, field cultivator, and combination tools are used

Other Tillage Types:

To keep data collections consistent across the geographic range of Minnesota, the TTS will also recognize 2 other categories of tillage: 1) reduced-till and 2) conventional-till.

Reduced-till (15-30% residue): Full-width tillage that involves one or more tillage trips, disturbs the entire soil surface and is performed prior to and/or during planting. There is 15-30 percent residue cover after planting or 500 to 1,000 pounds per acre of small grain

residue equivalent throughout the critical wind erosion period. Weed control is accomplished with crop protection products and/or row cultivation.

Reduced-till

- Entire field is tilled
- 15 to 30% residue after planting
- Usually one to 3 tillage trips (maybe more)
- Chisel plow, disk, field cultivator, and combination tools are used

Conventional-till or intensive-till (<15% residue): Full-width tillage that involves one or more tillage trips and disturbs the entire soil surface and is performed prior to and/or during planting. There is less than 15 percent residue cover after planting, or less than 500 pounds per acre of small grain residue equivalent throughout the critical wind erosion period. Generally involves plowing or intensive (numerous) tillage trips. Weed control is accomplished with crop protection products and/or row cultivation.

Conventional-till

- Entire field is tilled
- Less than 15% residue after planting
- Usually two to as many as four or more tillage trips are used involving the moldboard plow, chisel plow, disk, field cultivator, or combination tools.

Who will complete the TTS in 2007 and what compensation is available?

CTIC experience has shown that the best TTS data are collected by local staff, as you have the best knowledge of your local cropping systems. Therefore, it is our priority to first offer the SWCDs the opportunity to complete their county's TTS. For 2007, the compensation for completing the TTS will be \$1,115. The \$1,115 was estimated on the basis of 2 people working for 2.5 days, with a travel allowance of \$115. The 2007 compensation package is slightly higher than past offers and will likely be slightly higher than future offers as well. This is because we are asking for the SWCDs to assist with a new coordination process, re-establish and/or dig out routes, relearn residue visual skills, and provide copies of all hard copy and electronic versions of their routes to the WRC. If at all possible, GPS coordinates for all data collection points would be extremely valuable.

An agreement form to be completed and signed by an authorized SWCD contact is attached. Given our tight time frame for getting the TTS arrangements completed, the agreement form must be sent to the WRC and postmarked **by May 2, 2007**. Provision of TTS routes to the WRC, regardless of who completes the survey, has been requested by the MN Board of Water and Soil Resources. It was indicated that the SWCDs were the keepers of these routes, or jointly maintain the routes with their local NRCS staff. Upon completion of the TTS, each entity is asked to submit their TTS route and residue data and an invoice for their work (not to exceed \$1,115) to the WRC. WRC staff will provide a quality control review of the submitted information and either 1) work with the submitting entity to rectify any problems and then provide payment or 2) approve the submitted materials and provide payment.

What if the SWCD cannot complete the TTS?

If the SWCD cannot complete the TTS, we ask that the SWCD suggest an alternate entity to complete the survey. If no local entities can complete the TTS, the WRC staff will complete the survey on your behalf; however, we would still need the from you either way. Thanks for participating and please contact us with any questions.

Background on Surveys

Transects have been used by a number of states to quantify the amount of various tillage systems being used by crop. Although the exact method of data collection and procedure varies, all sought to improve the accuracy of the amount of conservation tillage by county.

Cropland surveys designed to estimate the amount of conservation tillage being used on the land are a relatively new concept. The Conservation Technology Information Center (CTIC) initiated the annual National Crop Residue Management Survey in 1982. The data gathered for this national survey usually involved a meeting of minds and data. NRCS field office personnel (usually district conservationists) in each county were annually urged to utilize area agricultural statistical data and meet with others who may have information to arrive at "best estimates" for the national survey. NRCS district conservationists are often assisted by soil and water conservation district personnel, county extension agents, agribusiness, local farm organizations, and other interested parties to complete a survey form that denotes these best estimates, which are generally based on personal knowledge.

Another survey conducted on a national basis is the 5-year NRCS National Resources Inventory (NRI). These data are collected on some 22 parameters, including physical characteristics of the land and the effects of agronomic practices on soil erosion. The NRI is a "point" survey method, where points correspond to random locations within a field. The first NRI in 1977 contained limited data on conservation tillage systems, as did subsequent surveys in 1982, 1987, 1992, and 1997.

Use of the NRI to estimate accurate acreage of conservation tillage or to document annual cropland trends in a state or county is greatly limited. The NRI has proven valuable in development of national resource policies.

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Page ____ of ____

43

Exhibit C

22-Crop to 8-Crop Mapping Index

Crop Residue Management Survey
8-Crop to 22-Crop Mapping

8-Crop		22-Crop
Crop	Abbreviation	Crop
Corn	C	Corn
Small Grain (Spring-Seeded)	Br	Barley
	O	Oats
	R	Rice
	WS	Wheat Spring
Small Grain (Fall-Seeded)	Ry	Rye
	WW	Wheat Winter
Soybeans (Full Season)	S	Soybeans (FS)*
Soybeans (Double-Cropped)	SD	Soybeans (DC)*
Cotton	Ct	Cotton*
Grain Sorghum (Full Season)	Sg	Sorghum (FS)
Grain Sorghum (Double-Cropped)	SD	Sorghum (DC)
Forage Crops	F	Forages (seeding year only)
Other Crops	B	Beans, peas, (dry edible, snap)
	Cn	Canola
	P	Peanuts
	Pt	Potatoes
	SB	Sugar Beets
	Su	Sugarcane
	S	Sunflowers
	T	Tobacco
	V	Vegetables and other crops
Permanent Pasture	Pp	Permanent pasture (seeding year only)
Fallow	Fa	Fallow

Exhibit D

2007 State and County Summaries

8-Crop on front of each page

22-Crop on back of each page

2007 Minnesota State Summary

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	8,260,071	168,778	38,941	1,848,572	2,056,291	2,985,940	3,217,840
Small Grain (Spring-Seeded)	680,788	2,115	0	22,838	24,953	543,508	112,327
Small Grain (Fall Seeded)	15,664	1,513	0	0	1,513	5,348	8,803
Soybeans (Full Season)	6,126,273	481,855	97,716	2,888,135	3,467,706	1,454,871	1,203,696
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	813,535	18,562	n/a	103,082	121,644	238,135	453,756
Other Crops ⁵	814,443	3,374	406	186,759	190,539	293,920	329,984
Total Planted Acres	16,710,774	676,197	137,063	5,049,386	5,862,646	5,521,722	5,326,406
Newly Established Permanent Pasture	25,054	5,244	n/a	2,230	7,474	12,036	5,544
Fallow	34,027	2,989	n/a	6,054	9,043	2,325	22,659
Conservation Reserve Program	1,802,769						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	8,260,071	2.0%	0.5%	22.4%	24.9%	36.1%	39.0%
Small Grain (Spring-Seeded)	680,788	0.3%	0.0%	3.4%	3.7%	79.8%	16.5%
Small Grain (Fall Seeded)	15,664	9.7%	0.0%	0.0%	9.7%	34.1%	56.2%
Soybeans (Full Season)	6,126,273	7.9%	1.6%	47.1%	56.6%	23.7%	19.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	813,535	2.3%	n/a	12.7%	15.0%	29.3%	55.8%
Other Crops ⁵	814,443	0.4%	0.0%	22.9%	23.4%	36.1%	40.5%
Total Planted Acres	16,710,774	4.0%	0.8%	30.2%	35.1%	33.0%	31.9%
Newly Established Permanent Pasture	25,054	20.9%	n/a	8.9%	29.8%	48.0%	22.1%
Fallow	34,027	8.8%	n/a	17.8%	26.6%	6.8%	66.6%

* Summary compiled using 67 counties that submitted CRM data in 2007

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Minnesota

Crop Acres			Conservation Tillage (greater than 30% residue)						Other Tillage Practices					
Annual Crop	Total Acres	No-Till		Ridge-Till		Mulch-Till		Total Conservation Tillage		(15-30% residue) Reduced-Till		(0-15% residue) Intensive-Till		
		Acres	Pcnt	Acres	Pcnt	Acres	Pcnt	Acres	Pcnt	Acres	Pcnt	Acres	Pcnt	
Barley	57,037	0	0%	0	0%	7,205	13%	7,205	13%	13,611	24%	36,221	64%	
Beans	184,592	2,563	1%	406	0%	49,084	27%	52,053	28%	55,900	30%	76,639	42%	
Canola	19,556	0	0%	0	0%	171	1%	171	1%	628	3%	18,757	96%	
Corn ¹	8,260,071	168,778	2%	38,941	0%	1,848,572	22%	2,056,291	25%	2,985,940	36%	3,217,840	39%	
Cotton	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	
Forage Crops ²	813,535	18,562	2%	n/a	n/a	103,082	13%	121,644	15%	238,135	29%	453,756	56%	
Oats	128,623	2,115	2%	0	0%	15,633	12%	17,748	14%	34,769	27%	76,106	59%	
Peanuts	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	
Potatoes	35,890	0	0%	0	0%	0	0%	0	0%	5,667	16%	30,223	84%	
Rice	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	
Rye	12,781	1,513	12%	0	0%	0	0%	1,513	12%	2,465	19%	8,803	69%	
Sorghum ¹	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	
Soybeans (FS)	6,126,273	481,855	8%	97,716	2%	2,888,135	47%	3,467,706	57%	1,454,871	24%	1,203,696	20%	
Soybeans (DC)	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	
Sugar Beets	481,788	811	0%	0	0%	128,822	27%	129,633	27%	203,731	42%	148,424	31%	
Sugarcane	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	
Sunflowers	89,765	0	0%	0	0%	8,670	10%	8,670	10%	27,976	31%	53,119	59%	
Tobacco	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	
Other Crops ³	2,852	0	0%	0	0%	12	0%	12	0%	18	1%	2,822	99%	
Spring Wheat	495,128	0	0%	0	0%	0	0%	0	0%	495,128	100%	0	0%	
Winter Wheat	2,883	0	0%	0	0%	0	0%	0	0%	2,883	100%	0	0%	
Total Acres	16,710,774	676,197	4%	137,063	1%	5,049,386	30%	5,862,646	35%	5,521,722	33%	5,326,406	32%	
Newly Est.														
Perm. Pasture	25,054	5,244	21%	n/a	n/a	2,230	9%	7,474	30%	12,036	48%	5,544	22%	
Fallow	34,027	2,989	9%	n/a	n/a	6,054	18%	9,043	27%	2,325	7%	22,659	67%	
CRP	1,802,769													

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

³ Includes other vegetables.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

Note: State total calculated using only the data collected from the 67 counties that reported in 2007.

2007 Summary for Becker County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	44,655	783	0	2,350	3,133	4,701	36,821
Small Grain (Spring-Seeded)	12,371	0	0	0	0	10,941	1,430
Small Grain (Fall Seeded)	333	0	0	0	0	0	333
Soybeans (Full Season)	72,425	4,190	599	9,577	14,366	20,351	37,708
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	19,938	0	n/a	0	0	0	19,938
Other Crops ⁵	11,605	0	0	1,959	1,959	1,947	7,699
Total Planted Acres	161,327	4,973	599	13,886	19,458	37,940	103,929
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	1,217	0	n/a	0	0	0	1,217
Conservation Reserve Program	36,184						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	44,655	1.8%	0.0%	5.3%	7.0%	10.5%	82.5%
Small Grain (Spring-Seeded)	12,371	0.0%	0.0%	0.0%	0.0%	88.4%	11.6%
Small Grain (Fall Seeded)	333	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Soybeans (Full Season)	72,425	5.8%	0.8%	13.2%	19.8%	28.1%	52.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	19,938	0.0%	n/a	0.0%	0.0%	0.0%	100.0%
Other Crops ⁵	11,605	0.0%	0.0%	16.9%	16.9%	16.8%	66.3%
Total Planted Acres	161,327	3.1%	0.4%	8.6%	12.1%	23.5%	64.4%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	1,217	0.0%	n/a	0.0%	0.0%	0.0%	100.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Becker County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	70	0	0	12	12	0	58
Canola	0	0	0	0	0	0	0
Corn ¹	44,655	783	0	2,350	3,133	4,701	36,821
Cotton	0	0	0	0	0	0	0
Forage Crops ²	19,938	0	n/a	0	0	0	19,938
Oats	4,291	0	0	0	0	2,861	1,430
Peanuts	0	0	0	0	0	0	0
Potatoes	826	0	0	0	0	0	826
Rice	0	0	0	0	0	0	0
Rye	333	0	0	0	0	0	333
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	72,425	4,190	599	9,577	14,366	20,351	37,708
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	10,709	0	0	1,947	1,947	1,947	6,815
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	8,080	0	0	0	0	8,080	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	161,327	4,973	599	13,886	19,458	37,940	103,929
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	1,217	0	n/a	0	0	0	1,217
Conservation Reserve Program	36,184						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Benton County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	63,014	3,425	228	9,361	13,014	13,927	36,073
Small Grain (Spring-Seeded)	3,195	0	0	0	0	3,195	0
Small Grain (Fall Seeded)	1,618	0	0	0	0	0	1,618
Soybeans (Full Season)	26,986	1,908	0	10,903	12,811	5,452	8,723
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	1,670	0	0	0	0	167	1,503
Total Planted Acres	96,483	5,333	228	20,264	25,825	22,741	47,917
Newly Established Permanent Pasture	5,244	5,244	n/a	0	5,244	0	0
Fallow	1,848	616	n/a	0	616	616	616
Conservation Reserve Program	2,496						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	63,014	5.4%	0.4%	14.9%	20.7%	22.1%	57.2%
Small Grain (Spring-Seeded)	3,195	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	1,618	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Soybeans (Full Season)	26,986	7.1%	0.0%	40.4%	47.5%	20.2%	32.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	1,670	0.0%	0.0%	0.0%	0.0%	10.0%	90.0%
Total Planted Acres	96,483	5.5%	0.2%	21.0%	26.8%	23.6%	49.7%
Newly Established Permanent Pasture	5,244	100.0%	n/a	0.0%	100.0%	0.0%	0.0%
Fallow	1,848	33.3%	n/a	0.0%	33.3%	33.3%	33.3%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Benton County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	63,014	3,425	228	9,361	13,014	13,927	36,073
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	3,195	0	0	0	0	3,195	0
Peanuts	0	0	0	0	0	0	0
Potatoes	1,670	0	0	0	0	167	1,503
Rice	0	0	0	0	0	0	0
Rye	1,618	0	0	0	0	0	1,618
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	26,986	1,908	0	10,903	12,811	5,452	8,723
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	96,483	5,333	228	20,264	25,825	22,741	47,917
Newly Established Permanent Pasture	5,244	5,244	n/a	0	5,244	0	0
Fallow	1,848	616	n/a	0	616	616	616
Conservation Reserve Program	2,496						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Big Stone County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	94,152	2,853	0	40,514	43,367	38,802	11,983
Small Grain (Spring-Seeded)	7,128	0	0	0	0	7,128	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	97,574	18,885	525	58,230	77,640	12,590	7,344
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	3,322	2,215	n/a	1,107	3,322	0	0
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	202,176	23,953	525	99,851	124,329	58,520	19,327
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	9,369						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	94,152	3.0%	0.0%	43.0%	46.1%	41.2%	12.7%
Small Grain (Spring-Seeded)	7,128	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	97,574	19.4%	0.5%	59.7%	79.6%	12.9%	7.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	3,322	66.7%	n/a	33.3%	100.0%	0.0%	0.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	202,176	11.8%	0.3%	49.4%	61.5%	28.9%	9.6%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Big Stone County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	94,152	2,853	0	40,514	43,367	38,802	11,983
Cotton	0	0	0	0	0	0	0
Forage Crops ²	3,322	2,215	n/a	1,107	3,322	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	97,574	18,885	525	58,230	77,640	12,590	7,344
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	7,128	0	0	0	0	7,128	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	202,176	23,953	525	99,851	124,329	58,520	19,327
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	9,369						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Blue Earth County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	201,101	0	0	8,820	8,820	67,622	124,659
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	141,838	19,661	1,404	54,769	75,834	49,152	16,852
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	793	82	0	438	520	211	62
Total Planted Acres	343,732	19,743	1,404	64,027	85,174	116,985	141,573
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	12,586						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	201,101	0.0%	0.0%	4.4%	4.4%	33.6%	62.0%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	141,838	13.9%	1.0%	38.6%	53.5%	34.7%	11.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	793	10.3%	0.0%	55.2%	65.6%	26.6%	7.8%
Total Planted Acres	343,732	5.7%	0.4%	18.6%	24.8%	34.0%	41.2%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Blue Earth County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	793	82	0	438	520	211	62
Canola	0	0	0	0	0	0	0
Corn ¹	201,101	0	0	8,820	8,820	67,622	124,659
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	141,838	19,661	1,404	54,769	75,834	49,152	16,852
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	343,732	19,743	1,404	64,027	85,174	116,985	141,573
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	12,586						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Brown County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	171,055	655	0	17,040	17,695	56,363	96,997
Small Grain (Spring-Seeded)	1,959	0	0	0	0	490	1,469
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	110,229	2,520	0	56,059	58,579	24,565	27,085
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	4,296	0	0	0	0	0	4,296
Total Planted Acres	287,539	3,175	0	73,099	76,274	81,418	129,847
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	16,410						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	171,055	0.4%	0.0%	10.0%	10.3%	33.0%	56.7%
Small Grain (Spring-Seeded)	1,959	0.0%	0.0%	0.0%	0.0%	25.0%	75.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	110,229	2.3%	0.0%	50.9%	53.1%	22.3%	24.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	4,296	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Planted Acres	287,539	1.1%	0.0%	25.4%	26.5%	28.3%	45.2%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Brown County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	4,296	0	0	0	0	0	4,296
Canola	0	0	0	0	0	0	0
Corn ¹	171,055	655	0	17,040	17,695	56,363	96,997
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	1,959	0	0	0	0	490	1,469
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	110,229	2,520	0	56,059	58,579	24,565	27,085
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	287,539	3,175	0	73,099	76,274	81,418	129,847
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	16,410						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Carver County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	62,781	0	0	0	0	1,202	61,579
Small Grain (Spring-Seeded)	1,470	0	0	0	0	1,470	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	36,195	276	0	276	552	3,868	31,775
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	13,399	1,489	n/a	0	1,489	1,489	10,421
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	113,845	1,765	0	276	2,041	8,029	103,775
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	3,433						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	62,781	0.0%	0.0%	0.0%	0.0%	1.9%	98.1%
Small Grain (Spring-Seeded)	1,470	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	36,195	0.8%	0.0%	0.8%	1.5%	10.7%	87.8%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	13,399	11.1%	n/a	0.0%	11.1%	11.1%	77.8%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	113,845	1.6%	0.0%	0.2%	1.8%	7.1%	91.2%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Carver County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	62,781	0	0	0	0	1,202	61,579
Cotton	0	0	0	0	0	0	0
Forage Crops ²	13,399	1,489	n/a	0	1,489	1,489	10,421
Oats	1,470	0	0	0	0	1,470	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	36,195	276	0	276	552	3,868	31,775
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	113,845	1,765	0	276	2,041	8,029	103,775
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	3,433						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Chippewa County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	165,234	2,065	0	14,458	16,523	54,390	94,321
Small Grain (Spring-Seeded)	1,776	0	0	0	0	1,776	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	86,811	1,736	0	38,197	39,933	28,937	17,941
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	36,425	0	0	9,692	9,692	15,891	10,842
Total Planted Acres	290,246	3,801	0	62,347	66,148	100,994	123,104
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	254	0	n/a	0	0	254	0
Conservation Reserve Program	15,309						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	165,234	1.2%	0.0%	8.8%	10.0%	32.9%	57.1%
Small Grain (Spring-Seeded)	1,776	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	86,811	2.0%	0.0%	44.0%	46.0%	33.3%	20.7%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	36,425	0.0%	0.0%	26.6%	26.6%	43.6%	29.8%
Total Planted Acres	290,246	1.3%	0.0%	21.5%	22.8%	34.8%	42.4%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	254	0.0%	n/a	0.0%	0.0%	100.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Chippewa County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	5,409	0	0	0	0	1,352	4,057
Canola	0	0	0	0	0	0	0
Corn ¹	165,234	2,065	0	14,458	16,523	54,390	94,321
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	86,811	1,736	0	38,197	39,933	28,937	17,941
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	31,016	0	0	9,692	9,692	14,539	6,785
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	1,776	0	0	0	0	1,776	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	290,246	3,801	0	62,347	66,148	100,994	123,104
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	254	0	n/a	0	0	254	0
Conservation Reserve Program	15,309						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Chisago County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	29,540	4,447	318	15,564	20,329	4,288	4,923
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	866	866	0	0	866	0	0
Soybeans (Full Season)	21,100	4,204	0	5,440	9,644	5,110	6,346
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	13,476	0	n/a	13,476	13,476	0	0
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	64,982	9,517	318	34,480	44,315	9,398	11,269
Newly Established Permanent Pasture	4,912	0	n/a	0	0	0	4,912
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	855						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	29,540	15.1%	1.1%	52.7%	68.8%	14.5%	16.7%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	866	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Soybeans (Full Season)	21,100	19.9%	0.0%	25.8%	45.7%	24.2%	30.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	13,476	0.0%	n/a	100.0%	100.0%	0.0%	0.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	64,982	14.6%	0.5%	53.1%	68.2%	14.5%	17.3%
Newly Established Permanent Pasture	4,912	0.0%	n/a	0.0%	0.0%	0.0%	100.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Chisago County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	29,540	4,447	318	15,564	20,329	4,288	4,923
Cotton	0	0	0	0	0	0	0
Forage Crops ²	13,476	0	n/a	13,476	13,476	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	866	866	0	0	866	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	21,100	4,204	0	5,440	9,644	5,110	6,346
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	64,982	9,517	318	34,480	44,315	9,398	11,269
Newly Established Permanent Pasture	4,912	0	n/a	0	0	0	4,912
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	855						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Clay County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	86,684	0	0	942	942	46,169	39,573
Small Grain (Spring-Seeded)	43,479	0	0	0	0	43,479	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	142,187	4,972	0	27,841	32,813	57,670	51,704
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	14,858	14,858	n/a	0	14,858	0	0
Other Crops ⁵	50,546	0	0	8,252	8,252	35,073	7,221
Total Planted Acres	337,754	19,830	0	37,035	56,865	182,391	98,498
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	8,495	0	n/a	5,663	5,663	0	2,832
Conservation Reserve Program	44,377						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	86,684	0.0%	0.0%	1.1%	1.1%	53.3%	45.7%
Small Grain (Spring-Seeded)	43,479	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	142,187	3.5%	0.0%	19.6%	23.1%	40.6%	36.4%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	14,858	100.0%	n/a	0.0%	100.0%	0.0%	0.0%
Other Crops ⁵	50,546	0.0%	0.0%	16.3%	16.3%	69.4%	14.3%
Total Planted Acres	337,754	5.9%	0.0%	11.0%	16.8%	54.0%	29.2%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	8,495	0.0%	n/a	66.7%	66.7%	0.0%	33.3%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Clay County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	86,684	0	0	942	942	46,169	39,573
Cotton	0	0	0	0	0	0	0
Forage Crops ²	14,858	14,858	n/a	0	14,858	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	142,187	4,972	0	27,841	32,813	57,670	51,704
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	50,546	0	0	8,252	8,252	35,073	7,221
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	43,479	0	0	0	0	43,479	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	337,754	19,830	0	37,035	56,865	182,391	98,498
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	8,495	0	n/a	5,663	5,663	0	2,832
Conservation Reserve Program	44,377						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Cottonwood County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	202,159	0	2,151	48,748	50,899	107,531	43,729
Small Grain (Spring-Seeded)	1,085	0	0	0	0	1,085	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	139,326	9,720	3,240	104,495	117,455	17,821	4,050
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	195	0	0	195	195	0	0
Total Planted Acres	342,765	9,720	5,391	153,438	168,549	126,437	47,779
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	14,812						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	202,159	0.0%	1.1%	24.1%	25.2%	53.2%	21.6%
Small Grain (Spring-Seeded)	1,085	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	139,326	7.0%	2.3%	75.0%	84.3%	12.8%	2.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	195	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Total Planted Acres	342,765	2.8%	1.6%	44.8%	49.2%	36.9%	13.9%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Cottonwood County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	202,159	0	2,151	48,748	50,899	107,531	43,729
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	139,326	9,720	3,240	104,495	117,455	17,821	4,050
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	195	0	0	195	195	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	1,085	0	0	0	0	1,085	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	342,765	9,720	5,391	153,438	168,549	126,437	47,779
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	14,812						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Dakota County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	104,946	1,702	0	30,633	32,335	47,651	24,960
Small Grain (Spring-Seeded)	1,256	0	0	0	0	879	377
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	51,345	6,756	0	28,375	35,131	10,359	5,855
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	7,882	0	n/a	0	0	3,941	3,941
Other Crops ⁵	6,066	0	0	0	0	4,226	1,840
Total Planted Acres	171,495	8,458	0	59,008	67,466	67,056	36,973
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	3,548						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	104,946	1.6%	0.0%	29.2%	30.8%	45.4%	23.8%
Small Grain (Spring-Seeded)	1,256	0.0%	0.0%	0.0%	0.0%	70.0%	30.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	51,345	13.2%	0.0%	55.3%	68.4%	20.2%	11.4%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	7,882	0.0%	n/a	0.0%	0.0%	50.0%	50.0%
Other Crops ⁵	6,066	0.0%	0.0%	0.0%	0.0%	69.7%	30.3%
Total Planted Acres	171,495	4.9%	0.0%	34.4%	39.3%	39.1%	21.6%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Dakota County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	4,902	0	0	0	0	3,501	1,401
Canola	0	0	0	0	0	0	0
Corn ¹	104,946	1,702	0	30,633	32,335	47,651	24,960
Cotton	0	0	0	0	0	0	0
Forage Crops ²	7,882	0	n/a	0	0	3,941	3,941
Oats	1,256	0	0	0	0	879	377
Peanuts	0	0	0	0	0	0	0
Potatoes	725	0	0	0	0	725	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	51,345	6,756	0	28,375	35,131	10,359	5,855
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	439	0	0	0	0	0	439
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	171,495	8,458	0	59,008	67,466	67,056	36,973
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	3,548						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Dodge County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	125,574	19,758	4,391	25,905	50,054	43,029	32,491
Small Grain (Spring-Seeded)	1,186	0	0	791	791	0	395
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	80,270	25,755	3,434	36,916	66,105	12,019	2,146
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	9,789	0	n/a	0	0	0	9,789
Other Crops ⁵	2,228	0	0	0	0	0	2,228
Total Planted Acres	219,047	45,513	7,825	63,612	116,950	55,048	47,049
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	3,671						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	125,574	15.7%	3.5%	20.6%	39.9%	34.3%	25.9%
Small Grain (Spring-Seeded)	1,186	0.0%	0.0%	66.7%	66.7%	0.0%	33.3%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	80,270	32.1%	4.3%	46.0%	82.4%	15.0%	2.7%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	9,789	0.0%	n/a	0.0%	0.0%	0.0%	100.0%
Other Crops ⁵	2,228	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Planted Acres	219,047	20.8%	3.6%	29.0%	53.4%	25.1%	21.5%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Dodge County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	2,225	0	0	0	0	0	2,225
Canola	0	0	0	0	0	0	0
Corn ¹	125,574	19,758	4,391	25,905	50,054	43,029	32,491
Cotton	0	0	0	0	0	0	0
Forage Crops ²	9,789	0	n/a	0	0	0	9,789
Oats	1,186	0	0	791	791	0	395
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	80,270	25,755	3,434	36,916	66,105	12,019	2,146
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	3	0	0	0	0	0	3
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	219,047	45,513	7,825	63,612	116,950	55,048	47,049
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	3,671						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Douglas County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	64,771	0	0	4,880	4,880	10,204	49,687
Small Grain (Spring-Seeded)	966	0	0	0	0	966	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	58,014	2,321	0	17,017	19,338	17,017	21,659
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	14,649	0	n/a	0	0	0	14,649
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	138,400	2,321	0	21,897	24,218	28,187	85,995
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	15	4	n/a	4	8	0	7
Conservation Reserve Program	32,835						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	64,771	0.0%	0.0%	7.5%	7.5%	15.8%	76.7%
Small Grain (Spring-Seeded)	966	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	58,014	4.0%	0.0%	29.3%	33.3%	29.3%	37.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	14,649	0.0%	n/a	0.0%	0.0%	0.0%	100.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	138,400	1.7%	0.0%	15.8%	17.5%	20.4%	62.1%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	15	26.7%	n/a	26.7%	53.3%	0.0%	46.7%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Douglas County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	64,771	0	0	4,880	4,880	10,204	49,687
Cotton	0	0	0	0	0	0	0
Forage Crops ²	14,649	0	n/a	0	0	0	14,649
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	58,014	2,321	0	17,017	19,338	17,017	21,659
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	966	0	0	0	0	966	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	138,400	2,321	0	21,897	24,218	28,187	85,995
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	15	4	n/a	4	8	0	7
Conservation Reserve Program	32,835						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Faribault County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	224,766	657	657	17,745	19,059	121,584	84,123
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	148,851	16,250	0	89,701	105,951	33,800	9,100
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	1,732	0	0	0	0	866	866
Total Planted Acres	375,349	16,907	657	107,446	125,010	156,250	94,089
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	6,035						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	224,766	0.3%	0.3%	7.9%	8.5%	54.1%	37.4%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	148,851	10.9%	0.0%	60.3%	71.2%	22.7%	6.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	1,732	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%
Total Planted Acres	375,349	4.5%	0.2%	28.6%	33.3%	41.6%	25.1%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Faribault County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	1,732	0	0	0	0	866	866
Canola	0	0	0	0	0	0	0
Corn ¹	224,766	657	657	17,745	19,059	121,584	84,123
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	148,851	16,250	0	89,701	105,951	33,800	9,100
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	375,349	16,907	657	107,446	125,010	156,250	94,089
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	6,035						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Fillmore County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	179,285	14,669	543	32,054	47,266	75,517	56,502
Small Grain (Spring-Seeded)	8,365	0	0	0	0	2,148	6,217
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	76,070	37,626	1,636	17,995	57,257	13,087	5,726
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	46,917	0	n/a	0	0	0	46,917
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	310,637	52,295	2,179	50,049	104,523	90,752	115,362
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	21,180						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	179,285	8.2%	0.3%	17.9%	26.4%	42.1%	31.5%
Small Grain (Spring-Seeded)	8,365	0.0%	0.0%	0.0%	0.0%	25.7%	74.3%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	76,070	49.5%	2.2%	23.7%	75.3%	17.2%	7.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	46,917	0.0%	n/a	0.0%	0.0%	0.0%	100.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	310,637	16.8%	0.7%	16.1%	33.6%	29.2%	37.1%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Fillmore County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	594	0	0	0	0	594	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	179,285	14,669	543	32,054	47,266	75,517	56,502
Cotton	0	0	0	0	0	0	0
Forage Crops ²	46,917	0	n/a	0	0	0	46,917
Oats	7,771	0	0	0	0	1,554	6,217
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	76,070	37,626	1,636	17,995	57,257	13,087	5,726
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	310,637	52,295	2,179	50,049	104,523	90,752	115,362
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	21,180						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Freeborn County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	203,094	7,964	0	15,929	23,893	79,076	100,125
Small Grain (Spring-Seeded)	1,368	0	0	0	0	231	1,137
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	131,208	32,656	583	34,989	68,228	51,900	11,080
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	2,334	0	0	318	318	636	1,380
Total Planted Acres	338,004	40,620	583	51,236	92,439	131,843	113,722
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	12,557						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	203,094	3.9%	0.0%	7.8%	11.8%	38.9%	49.3%
Small Grain (Spring-Seeded)	1,368	0.0%	0.0%	0.0%	0.0%	16.9%	83.1%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	131,208	24.9%	0.4%	26.7%	52.0%	39.6%	8.4%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	2,334	0.0%	0.0%	13.6%	13.6%	27.2%	59.1%
Total Planted Acres	338,004	12.0%	0.2%	15.2%	27.3%	39.0%	33.6%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Freeborn County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	1,272	0	0	318	318	636	318
Canola	0	0	0	0	0	0	0
Corn ¹	203,094	7,964	0	15,929	23,893	79,076	100,125
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	1,137	0	0	0	0	0	1,137
Peanuts	0	0	0	0	0	0	0
Potatoes	1,062	0	0	0	0	0	1,062
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	131,208	32,656	583	34,989	68,228	51,900	11,080
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	231	0	0	0	0	231	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	338,004	40,620	583	51,236	92,439	131,843	113,722
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	12,557						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Goodhue County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	162,754	6,566	0	37,992	44,558	57,222	60,974
Small Grain (Spring-Seeded)	5,482	0	0	0	0	5,482	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	78,963	12,752	0	42,669	55,421	19,618	3,924
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	30,124	0	n/a	21,087	21,087	6,025	3,012
Other Crops ⁵	2,025	596	0	1,072	1,668	357	0
Total Planted Acres	279,348	19,914	0	102,820	122,734	88,704	67,910
Newly Established Permanent Pasture	1,897	0	n/a	0	0	1,265	632
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	9,834						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	162,754	4.0%	0.0%	23.3%	27.4%	35.2%	37.5%
Small Grain (Spring-Seeded)	5,482	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	78,963	16.1%	0.0%	54.0%	70.2%	24.8%	5.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	30,124	0.0%	n/a	70.0%	70.0%	20.0%	10.0%
Other Crops ⁵	2,025	29.4%	0.0%	52.9%	82.4%	17.6%	0.0%
Total Planted Acres	279,348	7.1%	0.0%	36.8%	43.9%	31.8%	24.3%
Newly Established Permanent Pasture	1,897	0.0%	n/a	0.0%	0.0%	66.7%	33.3%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Goodhue County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	2,025	596	0	1,072	1,668	357	0
Canola	0	0	0	0	0	0	0
Corn ¹	162,754	6,566	0	37,992	44,558	57,222	60,974
Cotton	0	0	0	0	0	0	0
Forage Crops ²	30,124	0	n/a	21,087	21,087	6,025	3,012
Oats	4,881	0	0	0	0	4,881	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	78,963	12,752	0	42,669	55,421	19,618	3,924
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	601	0	0	0	0	601	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	279,348	19,914	0	102,820	122,734	88,704	67,910
Newly Established Permanent Pasture	1,897	0	n/a	0	0	1,265	632
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	9,834						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Grant County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	126,438	0	0	46,525	46,525	28,462	51,451
Small Grain (Spring-Seeded)	1,700	0	0	0	0	1,700	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	85,120	3,172	1,057	56,042	60,271	7,402	17,447
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	12,468	0	0	3,638	3,638	2,423	6,407
Total Planted Acres	225,726	3,172	1,057	106,205	110,434	39,987	75,305
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	29,928						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	126,438	0.0%	0.0%	36.8%	36.8%	22.5%	40.7%
Small Grain (Spring-Seeded)	1,700	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	85,120	3.7%	1.2%	65.8%	70.8%	8.7%	20.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	12,468	0.0%	0.0%	29.2%	29.2%	19.4%	51.4%
Total Planted Acres	225,726	1.4%	0.5%	47.1%	48.9%	17.7%	33.4%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Grant County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	1,738	0	0	869	869	0	869
Canola	0	0	0	0	0	0	0
Corn ¹	126,438	0	0	46,525	46,525	28,462	51,451
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	85,120	3,172	1,057	56,042	60,271	7,402	17,447
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	10,730	0	0	2,769	2,769	2,423	5,538
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	1,700	0	0	0	0	1,700	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	225,726	3,172	1,057	106,205	110,434	39,987	75,305
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	29,928						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Houston County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	57,641	15,333	0	20,586	35,919	10,648	11,074
Small Grain (Spring-Seeded)	4,499	776	0	1,551	2,327	1,707	465
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	25,330	9,650	0	8,745	18,395	3,015	3,920
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	36,475	0	n/a	0	0	36,475	0
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	123,945	25,759	0	30,882	56,641	51,845	15,459
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	16,995						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	57,641	26.6%	0.0%	35.7%	62.3%	18.5%	19.2%
Small Grain (Spring-Seeded)	4,499	17.2%	0.0%	34.5%	51.7%	37.9%	10.3%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	25,330	38.1%	0.0%	34.5%	72.6%	11.9%	15.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	36,475	0.0%	n/a	0.0%	0.0%	100.0%	0.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	123,945	20.8%	0.0%	24.9%	45.7%	41.8%	12.5%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Houston County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	57,641	15,333	0	20,586	35,919	10,648	11,074
Cotton	0	0	0	0	0	0	0
Forage Crops ²	36,475	0	n/a	0	0	36,475	0
Oats	4,499	776	0	1,551	2,327	1,707	465
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	25,330	9,650	0	8,745	18,395	3,015	3,920
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	123,945	25,759	0	30,882	56,641	51,845	15,459
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	16,995						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Isanti County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	35,455	5,430	0	1,278	6,708	3,833	24,914
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	2,121	0	0	0	0	0	2,121
Soybeans (Full Season)	25,237	7,415	0	5,464	12,879	4,813	7,545
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	9,209	0	n/a	6,139	6,139	0	3,070
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	72,022	12,845	0	12,881	25,726	8,646	37,650
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	737						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	35,455	15.3%	0.0%	3.6%	18.9%	10.8%	70.3%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	2,121	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Soybeans (Full Season)	25,237	29.4%	0.0%	21.7%	51.0%	19.1%	29.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	9,209	0.0%	n/a	66.7%	66.7%	0.0%	33.3%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	72,022	17.8%	0.0%	17.9%	35.7%	12.0%	52.3%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Isanti County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	35,455	5,430	0	1,278	6,708	3,833	24,914
Cotton	0	0	0	0	0	0	0
Forage Crops ²	9,209	0	n/a	6,139	6,139	0	3,070
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	2,121	0	0	0	0	0	2,121
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	25,237	7,415	0	5,464	12,879	4,813	7,545
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	72,022	12,845	0	12,881	25,726	8,646	37,650
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	737						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Jackson County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	186,580	3,405	2,043	53,795	59,243	102,142	25,195
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	146,813	11,942	6,322	107,475	125,739	16,859	4,215
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	2,436	0	n/a	0	0	1,218	1,218
Other Crops ⁵	27	0	0	0	0	0	27
Total Planted Acres	335,856	15,347	8,365	161,270	184,982	120,219	30,655
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	9,336						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	186,580	1.8%	1.1%	28.8%	31.8%	54.7%	13.5%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	146,813	8.1%	4.3%	73.2%	85.6%	11.5%	2.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	2,436	0.0%	n/a	0.0%	0.0%	50.0%	50.0%
Other Crops ⁵	27	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Planted Acres	335,856	4.6%	2.5%	48.0%	55.1%	35.8%	9.1%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Jackson County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	186,580	3,405	2,043	53,795	59,243	102,142	25,195
Cotton	0	0	0	0	0	0	0
Forage Crops ²	2,436	0	n/a	0	0	1,218	1,218
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	146,813	11,942	6,322	107,475	125,739	16,859	4,215
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	27	0	0	0	0	0	27
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	335,856	15,347	8,365	161,270	184,982	120,219	30,655
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	9,336						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Kandiyohi County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	164,299	5,188	0	19,024	24,212	43,813	96,274
Small Grain (Spring-Seeded)	2,023	0	0	0	0	2,023	0
Small Grain (Fall Seeded)	86	0	0	0	0	86	0
Soybeans (Full Season)	97,211	10,007	1,430	65,760	77,197	13,581	6,433
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	13,947	0	n/a	0	0	13,947	0
Other Crops ⁵	19,476	0	0	8,045	8,045	4,814	6,617
Total Planted Acres	297,042	15,195	1,430	92,829	109,454	78,264	109,324
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	40,852						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	164,299	3.2%	0.0%	11.6%	14.7%	26.7%	58.6%
Small Grain (Spring-Seeded)	2,023	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	86	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Soybeans (Full Season)	97,211	10.3%	1.5%	67.6%	79.4%	14.0%	6.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	13,947	0.0%	n/a	0.0%	0.0%	100.0%	0.0%
Other Crops ⁵	19,476	0.0%	0.0%	41.3%	41.3%	24.7%	34.0%
Total Planted Acres	297,042	5.1%	0.5%	31.3%	36.8%	26.3%	36.8%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Kandiyohi County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	6,550	0	0	936	936	936	4,678
Canola	0	0	0	0	0	0	0
Corn ¹	164,299	5,188	0	19,024	24,212	43,813	96,274
Cotton	0	0	0	0	0	0	0
Forage Crops ²	13,947	0	n/a	0	0	13,947	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	97,211	10,007	1,430	65,760	77,197	13,581	6,433
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	12,926	0	0	7,109	7,109	3,878	1,939
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	2,023	0	0	0	0	2,023	0
Winter Wheat	86	0	0	0	0	86	0
Total Planted Acres	297,042	15,195	1,430	92,829	109,454	78,264	109,324
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	40,852						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Kittson County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	4,644	0	0	516	516	2,064	2,064
Small Grain (Spring-Seeded)	74,155	0	0	2,236	2,236	71,919	0
Small Grain (Fall Seeded)	702	526	0	0	526	176	0
Soybeans (Full Season)	81,570	800	0	3,199	3,999	40,785	36,786
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	16,313	0	n/a	0	0	16,313	0
Other Crops ⁵	37,229	0	0	1,345	1,345	22,438	13,446
Total Planted Acres	214,613	1,326	0	7,296	8,622	153,695	52,296
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	111,295						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	4,644	0.0%	0.0%	11.1%	11.1%	44.4%	44.4%
Small Grain (Spring-Seeded)	74,155	0.0%	0.0%	3.0%	3.0%	97.0%	0.0%
Small Grain (Fall Seeded)	702	74.9%	0.0%	0.0%	74.9%	25.1%	0.0%
Soybeans (Full Season)	81,570	1.0%	0.0%	3.9%	4.9%	50.0%	45.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	16,313	0.0%	n/a	0.0%	0.0%	100.0%	0.0%
Other Crops ⁵	37,229	0.0%	0.0%	3.6%	3.6%	60.3%	36.1%
Total Planted Acres	214,613	0.6%	0.0%	3.4%	4.0%	71.6%	24.4%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Kittson County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	4,644	0	0	516	516	2,064	2,064
Cotton	0	0	0	0	0	0	0
Forage Crops ²	16,313	0	n/a	0	0	16,313	0
Oats	4,472	0	0	2,236	2,236	2,236	0
Peanuts	0	0	0	0	0	0	0
Potatoes	925	0	0	0	0	925	0
Rice	0	0	0	0	0	0	0
Rye	702	526	0	0	526	176	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	81,570	800	0	3,199	3,999	40,785	36,786
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	36,304	0	0	1,345	1,345	21,513	13,446
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	69,683	0	0	0	0	69,683	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	214,613	1,326	0	7,296	8,622	153,695	52,296
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	111,295						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Lac Qui Parle County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	183,916	699	2,098	44,755	47,552	80,420	55,944
Small Grain (Spring-Seeded)	4,104	0	0	0	0	4,104	0
Small Grain (Fall Seeded)	1,540	0	0	0	0	1,540	0
Soybeans (Full Season)	144,508	11,585	0	87,802	99,387	30,487	14,634
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	8,171	0	n/a	8,171	8,171	0	0
Other Crops ⁵	114	0	0	0	0	114	0
Total Planted Acres	342,353	12,284	2,098	140,728	155,110	116,665	70,578
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	34,499						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	183,916	0.4%	1.1%	24.3%	25.9%	43.7%	30.4%
Small Grain (Spring-Seeded)	4,104	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	1,540	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Soybeans (Full Season)	144,508	8.0%	0.0%	60.8%	68.8%	21.1%	10.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	8,171	0.0%	n/a	100.0%	100.0%	0.0%	0.0%
Other Crops ⁵	114	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Total Planted Acres	342,353	3.6%	0.6%	41.1%	45.3%	34.1%	20.6%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Lac Qui Parle County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	114	0	0	0	0	114	0
Canola	0	0	0	0	0	0	0
Corn ¹	183,916	699	2,098	44,755	47,552	80,420	55,944
Cotton	0	0	0	0	0	0	0
Forage Crops ²	8,171	0	n/a	8,171	8,171	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	144,508	11,585	0	87,802	99,387	30,487	14,634
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	4,104	0	0	0	0	4,104	0
Winter Wheat	1,540	0	0	0	0	1,540	0
Total Planted Acres	342,353	12,284	2,098	140,728	155,110	116,665	70,578
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	34,499						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Le Sueur County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	102,069	1,140	0	29,937	31,077	57,022	13,970
Small Grain (Spring-Seeded)	611	0	0	0	0	611	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	74,019	5,734	261	53,429	59,424	11,207	3,388
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	6,492	0	n/a	0	0	6,492	0
Other Crops ⁵	2,104	0	0	0	0	1,578	526
Total Planted Acres	185,295	6,874	261	83,366	90,501	76,910	17,884
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	17,300						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	102,069	1.1%	0.0%	29.3%	30.4%	55.9%	13.7%
Small Grain (Spring-Seeded)	611	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	74,019	7.7%	0.4%	72.2%	80.3%	15.1%	4.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	6,492	0.0%	n/a	0.0%	0.0%	100.0%	0.0%
Other Crops ⁵	2,104	0.0%	0.0%	0.0%	0.0%	75.0%	25.0%
Total Planted Acres	185,295	3.7%	0.1%	45.0%	48.8%	41.5%	9.7%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Le Sueur County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	2,104	0	0	0	0	1,578	526
Canola	0	0	0	0	0	0	0
Corn ¹	102,069	1,140	0	29,937	31,077	57,022	13,970
Cotton	0	0	0	0	0	0	0
Forage Crops ²	6,492	0	n/a	0	0	6,492	0
Oats	611	0	0	0	0	611	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	74,019	5,734	261	53,429	59,424	11,207	3,388
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	185,295	6,874	261	83,366	90,501	76,910	17,884
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	17,300						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Lincoln County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	115,892	0	0	28,357	28,357	45,617	41,918
Small Grain (Spring-Seeded)	7,040	0	0	0	0	7,040	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	73,507	3,898	557	54,573	59,028	8,910	5,569
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	11,284	0	n/a	0	0	11,284	0
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	207,723	3,898	557	82,930	87,385	72,851	47,487
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	39,975						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	115,892	0.0%	0.0%	24.5%	24.5%	39.4%	36.2%
Small Grain (Spring-Seeded)	7,040	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	73,507	5.3%	0.8%	74.2%	80.3%	12.1%	7.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	11,284	0.0%	n/a	0.0%	0.0%	100.0%	0.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	207,723	1.9%	0.3%	39.9%	42.1%	35.1%	22.9%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Lincoln County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	115,892	0	0	28,357	28,357	45,617	41,918
Cotton	0	0	0	0	0	0	0
Forage Crops ²	11,284	0	n/a	0	0	11,284	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	73,507	3,898	557	54,573	59,028	8,910	5,569
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	7,040	0	0	0	0	7,040	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	207,723	3,898	557	82,930	87,385	72,851	47,487
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	39,975						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Lyon County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	195,847	2,945	0	150,198	153,143	27,242	15,462
Small Grain (Spring-Seeded)	1,105	0	0	1,105	1,105	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	140,452	6,563	1,969	124,044	132,576	3,282	4,594
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	10,461	0	n/a	10,461	10,461	0	0
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	347,865	9,508	1,969	285,808	297,285	30,524	20,056
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	17,926						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	195,847	1.5%	0.0%	76.7%	78.2%	13.9%	7.9%
Small Grain (Spring-Seeded)	1,105	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	140,452	4.7%	1.4%	88.3%	94.4%	2.3%	3.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	10,461	0.0%	n/a	100.0%	100.0%	0.0%	0.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	347,865	2.7%	0.6%	82.2%	85.5%	8.8%	5.8%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Lyon County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	195,847	2,945	0	150,198	153,143	27,242	15,462
Cotton	0	0	0	0	0	0	0
Forage Crops ²	10,461	0	n/a	10,461	10,461	0	0
Oats	1,105	0	0	1,105	1,105	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	140,452	6,563	1,969	124,044	132,576	3,282	4,594
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	347,865	9,508	1,969	285,808	297,285	30,524	20,056
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	17,926						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Mc Leod County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	123,170	0	698	21,982	22,680	69,087	31,403
Small Grain (Spring-Seeded)	2,009	0	0	0	0	1,162	847
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	69,510	1,249	0	34,963	36,212	15,400	17,898
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	2,687	0	0	592	592	870	1,225
Total Planted Acres	197,376	1,249	698	57,537	59,484	86,519	51,373
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	6,549						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	123,170	0.0%	0.6%	17.8%	18.4%	56.1%	25.5%
Small Grain (Spring-Seeded)	2,009	0.0%	0.0%	0.0%	0.0%	57.8%	42.2%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	69,510	1.8%	0.0%	50.3%	52.1%	22.2%	25.7%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	2,687	0.0%	0.0%	22.0%	22.0%	32.4%	45.6%
Total Planted Acres	197,376	0.6%	0.4%	29.2%	30.1%	43.8%	26.0%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Mc Leod County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	1,153	0	0	0	0	0	1,153
Canola	0	0	0	0	0	0	0
Corn ¹	123,170	0	698	21,982	22,680	69,087	31,403
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	1,271	0	0	0	0	424	847
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	69,510	1,249	0	34,963	36,212	15,400	17,898
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	1,014	0	0	72	72	870	72
Sugarcane	0	0	0	0	0	0	0
Sunflowers	520	0	0	520	520	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	738	0	0	0	0	738	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	197,376	1,249	698	57,537	59,484	86,519	51,373
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	6,549						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Mahnomen County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	34,874	0	375	0	375	6,375	28,124
Small Grain (Spring-Seeded)	4,574	0	0	0	0	3,188	1,386
Small Grain (Fall Seeded)	165	0	0	0	0	165	0
Soybeans (Full Season)	45,798	3,293	0	0	3,293	10,177	32,328
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	9,616	1,294	0	0	1,294	1,971	6,351
Total Planted Acres	95,027	4,587	375	0	4,962	21,876	68,189
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	1,623	0	n/a	0	0	0	1,623
Conservation Reserve Program	23,771						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	34,874	0.0%	1.1%	0.0%	1.1%	18.3%	80.6%
Small Grain (Spring-Seeded)	4,574	0.0%	0.0%	0.0%	0.0%	69.7%	30.3%
Small Grain (Fall Seeded)	165	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Soybeans (Full Season)	45,798	7.2%	0.0%	0.0%	7.2%	22.2%	70.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	9,616	13.5%	0.0%	0.0%	13.5%	20.5%	66.0%
Total Planted Acres	95,027	4.8%	0.4%	0.0%	5.2%	23.0%	71.8%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	1,623	0.0%	n/a	0.0%	0.0%	0.0%	100.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Mahnomen County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	335	0	0	0	0	0	335
Beans	4,063	677	0	0	677	1,354	2,032
Canola	0	0	0	0	0	0	0
Corn ¹	34,874	0	375	0	375	6,375	28,124
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	1,051	0	0	0	0	0	1,051
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	45,798	3,293	0	0	3,293	10,177	32,328
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	5,553	617	0	0	617	617	4,319
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	3,188	0	0	0	0	3,188	0
Winter Wheat	165	0	0	0	0	165	0
Total Planted Acres	95,027	4,587	375	0	4,962	21,876	68,189
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	1,623	0	n/a	0	0	0	1,623
Conservation Reserve Program	23,771						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Marshall County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	17,155	0	0	1,183	1,183	5,916	10,056
Small Grain (Spring-Seeded)	79,361	0	0	4,834	4,834	57,609	16,918
Small Grain (Fall Seeded)	771	0	0	0	0	771	0
Soybeans (Full Season)	162,293	1,176	0	36,457	37,633	60,566	64,094
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	91,954	0	0	33,702	33,702	39,013	19,239
Total Planted Acres	351,534	1,176	0	76,176	77,352	163,875	110,307
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	5,523	0	n/a	0	0	0	5,523
Conservation Reserve Program	215,610						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	17,155	0.0%	0.0%	6.9%	6.9%	34.5%	58.6%
Small Grain (Spring-Seeded)	79,361	0.0%	0.0%	6.1%	6.1%	72.6%	21.3%
Small Grain (Fall Seeded)	771	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Soybeans (Full Season)	162,293	0.7%	0.0%	22.5%	23.2%	37.3%	39.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	91,954	0.0%	0.0%	36.7%	36.7%	42.4%	20.9%
Total Planted Acres	351,534	0.3%	0.0%	21.7%	22.0%	46.6%	31.4%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	5,523	0.0%	n/a	0.0%	0.0%	0.0%	100.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Marshall County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	31,420	0	0	4,834	4,834	9,668	16,918
Beans	13,942	0	0	10,456	10,456	3,486	0
Canola	2,224	0	0	171	171	513	1,540
Corn ¹	17,155	0	0	1,183	1,183	5,916	10,056
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	162,293	1,176	0	36,457	37,633	60,566	64,094
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	47,537	0	0	20,721	20,721	25,597	1,219
Sugarcane	0	0	0	0	0	0	0
Sunflowers	28,251	0	0	2,354	2,354	9,417	16,480
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	47,941	0	0	0	0	47,941	0
Winter Wheat	771	0	0	0	0	771	0
Total Planted Acres	351,534	1,176	0	76,176	77,352	163,875	110,307
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	5,523	0	n/a	0	0	0	5,523
Conservation Reserve Program	215,610						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Martin County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	248,708	1,636	0	47,451	49,087	161,169	38,452
Small Grain (Spring-Seeded)	704	0	0	352	352	352	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	155,872	11,796	5,055	101,106	117,957	35,387	2,528
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	405,284	13,432	5,055	148,909	167,396	196,908	40,980
Newly Established Permanent Pasture	2,230	0	n/a	2,230	2,230	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	7,185						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	248,708	0.7%	0.0%	19.1%	19.7%	64.8%	15.5%
Small Grain (Spring-Seeded)	704	0.0%	0.0%	50.0%	50.0%	50.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	155,872	7.6%	3.2%	64.9%	75.7%	22.7%	1.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	405,284	3.3%	1.2%	36.7%	41.3%	48.6%	10.1%
Newly Established Permanent Pasture	2,230	0.0%	n/a	100.0%	100.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Martin County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	248,708	1,636	0	47,451	49,087	161,169	38,452
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	704	0	0	352	352	352	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	155,872	11,796	5,055	101,106	117,957	35,387	2,528
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	405,284	13,432	5,055	148,909	167,396	196,908	40,980
Newly Established Permanent Pasture	2,230	0	n/a	2,230	2,230	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	7,185						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Meeker County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	125,718	0	0	904	904	33,917	90,897
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	90,456	0	0	3,753	3,753	47,668	39,035
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	11,669	0	n/a	0	0	11,669	0
Other Crops ⁵	3,149	0	0	0	0	1,204	1,945
Total Planted Acres	230,992	0	0	4,657	4,657	94,458	131,877
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	18,037						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	125,718	0.0%	0.0%	0.7%	0.7%	27.0%	72.3%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	90,456	0.0%	0.0%	4.1%	4.1%	52.7%	43.2%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	11,669	0.0%	n/a	0.0%	0.0%	100.0%	0.0%
Other Crops ⁵	3,149	0.0%	0.0%	0.0%	0.0%	38.2%	61.8%
Total Planted Acres	230,992	0.0%	0.0%	2.0%	2.0%	40.9%	57.1%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Meeker County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	1,945	0	0	0	0	0	1,945
Canola	0	0	0	0	0	0	0
Corn ¹	125,718	0	0	904	904	33,917	90,897
Cotton	0	0	0	0	0	0	0
Forage Crops ²	11,669	0	n/a	0	0	11,669	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	90,456	0	0	3,753	3,753	47,668	39,035
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	1,204	0	0	0	0	1,204	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	230,992	0	0	4,657	4,657	94,458	131,877
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	18,037						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Morrison County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	95,805	4,301	0	14,860	19,161	28,155	48,489
Small Grain (Spring-Seeded)	9,707	0	0	968	968	3,898	4,841
Small Grain (Fall Seeded)	2,525	0	0	0	0	2,525	0
Soybeans (Full Season)	20,667	1,355	0	4,743	6,098	5,760	8,809
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	56,546	0	n/a	4,350	4,350	30,448	21,748
Other Crops ⁵	7,334	0	0	504	504	3,378	3,452
Total Planted Acres	192,584	5,656	0	25,425	31,081	74,164	87,339
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	2,859	0	n/a	0	0	0	2,859
Conservation Reserve Program	7,162						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	95,805	4.5%	0.0%	15.5%	20.0%	29.4%	50.6%
Small Grain (Spring-Seeded)	9,707	0.0%	0.0%	10.0%	10.0%	40.2%	49.9%
Small Grain (Fall Seeded)	2,525	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Soybeans (Full Season)	20,667	6.6%	0.0%	22.9%	29.5%	27.9%	42.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	56,546	0.0%	n/a	7.7%	7.7%	53.8%	38.5%
Other Crops ⁵	7,334	0.0%	0.0%	6.9%	6.9%	46.1%	47.1%
Total Planted Acres	192,584	2.9%	0.0%	13.2%	16.1%	38.5%	45.4%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	2,859	0.0%	n/a	0.0%	0.0%	0.0%	100.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Morrison County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	978	0	0	0	0	978	0
Beans	4,054	0	0	0	0	3,378	676
Canola	0	0	0	0	0	0	0
Corn ¹	95,805	4,301	0	14,860	19,161	28,155	48,489
Cotton	0	0	0	0	0	0	0
Forage Crops ²	56,546	0	n/a	4,350	4,350	30,448	21,748
Oats	7,745	0	0	968	968	1,936	4,841
Peanuts	0	0	0	0	0	0	0
Potatoes	2,776	0	0	0	0	0	2,776
Rice	0	0	0	0	0	0	0
Rye	2,289	0	0	0	0	2,289	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	20,667	1,355	0	4,743	6,098	5,760	8,809
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	504	0	0	504	504	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	984	0	0	0	0	984	0
Winter Wheat	236	0	0	0	0	236	0
Total Planted Acres	192,584	5,656	0	25,425	31,081	74,164	87,339
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	2,859	0	n/a	0	0	0	2,859
Conservation Reserve Program	7,162						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Mower County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	209,898	2,570	0	79,676	82,246	103,664	23,988
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	144,935	26,744	0	83,683	110,427	31,920	2,588
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	6,630	0	0	1,473	1,473	0	5,157
Total Planted Acres	361,463	29,314	0	164,832	194,146	135,584	31,733
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	12	0	n/a	6	6	0	6
Conservation Reserve Program	5,434						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	209,898	1.2%	0.0%	38.0%	39.2%	49.4%	11.4%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	144,935	18.5%	0.0%	57.7%	76.2%	22.0%	1.8%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	6,630	0.0%	0.0%	22.2%	22.2%	0.0%	77.8%
Total Planted Acres	361,463	8.1%	0.0%	45.6%	53.7%	37.5%	8.8%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	12	0.0%	n/a	50.0%	50.0%	0.0%	50.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Mower County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	6,630	0	0	1,473	1,473	0	5,157
Canola	0	0	0	0	0	0	0
Corn ¹	209,898	2,570	0	79,676	82,246	103,664	23,988
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	144,935	26,744	0	83,683	110,427	31,920	2,588
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	361,463	29,314	0	164,832	194,146	135,584	31,733
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	12	0	n/a	6	6	0	6
Conservation Reserve Program	5,434						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Murray County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	195,950	6,957	0	37,103	44,060	89,279	62,611
Small Grain (Spring-Seeded)	2,903	0	0	2,903	2,903	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	151,409	3,925	0	113,838	117,763	29,160	4,486
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	350,262	10,882	0	153,844	164,726	118,439	67,097
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	23,784						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	195,950	3.6%	0.0%	18.9%	22.5%	45.6%	32.0%
Small Grain (Spring-Seeded)	2,903	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	151,409	2.6%	0.0%	75.2%	77.8%	19.3%	3.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	350,262	3.1%	0.0%	43.9%	47.0%	33.8%	19.2%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Murray County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	195,950	6,957	0	37,103	44,060	89,279	62,611
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	2,903	0	0	2,903	2,903	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	151,409	3,925	0	113,838	117,763	29,160	4,486
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	350,262	10,882	0	153,844	164,726	118,439	67,097
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	23,784						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Nicollet County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	136,439	0	0	23,524	23,524	88,108	24,807
Small Grain (Spring-Seeded)	812	0	0	325	325	325	162
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	73,504	1,423	0	47,896	49,319	18,020	6,165
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	900	0	0	450	450	450	0
Total Planted Acres	211,655	1,423	0	72,195	73,618	106,903	31,134
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	5,352						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	136,439	0.0%	0.0%	17.2%	17.2%	64.6%	18.2%
Small Grain (Spring-Seeded)	812	0.0%	0.0%	40.0%	40.0%	40.0%	20.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	73,504	1.9%	0.0%	65.2%	67.1%	24.5%	8.4%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	900	0.0%	0.0%	50.0%	50.0%	50.0%	0.0%
Total Planted Acres	211,655	0.7%	0.0%	34.1%	34.8%	50.5%	14.7%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Nicollet County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	900	0	0	450	450	450	0
Canola	0	0	0	0	0	0	0
Corn ¹	136,439	0	0	23,524	23,524	88,108	24,807
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	812	0	0	325	325	325	162
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	73,504	1,423	0	47,896	49,319	18,020	6,165
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	211,655	1,423	0	72,195	73,618	106,903	31,134
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	5,352						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Nobles County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	219,658	0	0	122,126	122,126	89,899	7,633
Small Grain (Spring-Seeded)	1,763	0	0	0	0	1,763	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	158,475	7,837	0	123,645	131,482	24,381	2,612
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	379,896	7,837	0	245,771	253,608	116,043	10,245
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	9,056						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	219,658	0.0%	0.0%	55.6%	55.6%	40.9%	3.5%
Small Grain (Spring-Seeded)	1,763	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	158,475	4.9%	0.0%	78.0%	83.0%	15.4%	1.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	379,896	2.1%	0.0%	64.7%	66.8%	30.5%	2.7%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Nobles County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	219,658	0	0	122,126	122,126	89,899	7,633
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	1,409	0	0	0	0	1,409	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	158,475	7,837	0	123,645	131,482	24,381	2,612
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	354	0	0	0	0	354	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	379,896	7,837	0	245,771	253,608	116,043	10,245
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	9,056						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Norman County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	73,725	0	0	6,144	6,144	22,527	45,054
Small Grain (Spring-Seeded)	44,543	0	0	0	0	44,543	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	149,244	8,722	0	23,259	31,981	65,900	51,363
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	67,816	0	0	6,914	6,914	32,632	28,270
Total Planted Acres	335,328	8,722	0	36,317	45,039	165,602	124,687
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	2,038	2,038	n/a	0	2,038	0	0
Conservation Reserve Program	57,140						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	73,725	0.0%	0.0%	8.3%	8.3%	30.6%	61.1%
Small Grain (Spring-Seeded)	44,543	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	149,244	5.8%	0.0%	15.6%	21.4%	44.2%	34.4%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	67,816	0.0%	0.0%	10.2%	10.2%	48.1%	41.7%
Total Planted Acres	335,328	2.6%	0.0%	10.8%	13.4%	49.4%	37.2%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	2,038	100.0%	n/a	0.0%	100.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Norman County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	4,852	0	0	0	0	2,426	2,426
Canola	0	0	0	0	0	0	0
Corn ¹	73,725	0	0	6,144	6,144	22,527	45,054
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	149,244	8,722	0	23,259	31,981	65,900	51,363
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	50,124	0	0	6,914	6,914	25,926	17,284
Sugarcane	0	0	0	0	0	0	0
Sunflowers	12,840	0	0	0	0	4,280	8,560
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	44,543	0	0	0	0	44,543	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	335,328	8,722	0	36,317	45,039	165,602	124,687
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	2,038	2,038	n/a	0	2,038	0	0
Conservation Reserve Program	57,140						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Olmsted County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	131,958	11,058	0	8,478	19,536	29,488	82,934
Small Grain (Spring-Seeded)	3,336	834	0	0	834	0	2,502
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	62,959	25,577	0	4,722	30,299	23,610	9,050
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	5,335	0	0	0	0	0	5,335
Total Planted Acres	203,588	37,469	0	13,200	50,669	53,098	99,821
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	12,439						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	131,958	8.4%	0.0%	6.4%	14.8%	22.3%	62.8%
Small Grain (Spring-Seeded)	3,336	25.0%	0.0%	0.0%	25.0%	0.0%	75.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	62,959	40.6%	0.0%	7.5%	48.1%	37.5%	14.4%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	5,335	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Planted Acres	203,588	18.4%	0.0%	6.5%	24.9%	26.1%	49.0%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Olmsted County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	5,335	0	0	0	0	0	5,335
Canola	0	0	0	0	0	0	0
Corn ¹	131,958	11,058	0	8,478	19,536	29,488	82,934
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	3,336	834	0	0	834	0	2,502
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	62,959	25,577	0	4,722	30,299	23,610	9,050
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	203,588	37,469	0	13,200	50,669	53,098	99,821
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	12,439						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Otter Tail County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	163,819	2,184	0	22,389	24,573	66,620	72,626
Small Grain (Spring-Seeded)	46,346	0	0	0	0	34,210	12,136
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	111,103	16,119	0	28,783	44,902	37,418	28,783
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	77,763	0	n/a	8,640	8,640	8,640	60,483
Other Crops ⁵	22,109	406	406	3,657	4,469	4,345	13,295
Total Planted Acres	421,140	18,709	406	63,469	82,584	151,233	187,323
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	87,561						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	163,819	1.3%	0.0%	13.7%	15.0%	40.7%	44.3%
Small Grain (Spring-Seeded)	46,346	0.0%	0.0%	0.0%	0.0%	73.8%	26.2%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	111,103	14.5%	0.0%	25.9%	40.4%	33.7%	25.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	77,763	0.0%	n/a	11.1%	11.1%	11.1%	77.8%
Other Crops ⁵	22,109	1.8%	1.8%	16.5%	20.2%	19.7%	60.1%
Total Planted Acres	421,140	4.4%	0.1%	15.1%	19.6%	35.9%	44.5%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Otter Tail County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	8,126	406	406	3,657	4,469	1,625	2,032
Canola	0	0	0	0	0	0	0
Corn ¹	163,819	2,184	0	22,389	24,573	66,620	72,626
Cotton	0	0	0	0	0	0	0
Forage Crops ²	77,763	0	n/a	8,640	8,640	8,640	60,483
Oats	16,182	0	0	0	0	4,046	12,136
Peanuts	0	0	0	0	0	0	0
Potatoes	8,169	0	0	0	0	0	8,169
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	111,103	16,119	0	28,783	44,902	37,418	28,783
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	3,626	0	0	0	0	2,720	906
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	2,188	0	0	0	0	0	2,188
Spring Wheat	30,164	0	0	0	0	30,164	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	421,140	18,709	406	63,469	82,584	151,233	187,323
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	87,561						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Pennington County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	4,564	0	0	456	456	913	3,195
Small Grain (Spring-Seeded)	2,021	0	0	0	0	2,021	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	77,453	3,561	0	12,464	16,025	26,708	34,720
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	25,902	0	n/a	0	0	0	25,902
Other Crops ⁵	8,937	0	0	864	864	1,728	6,345
Total Planted Acres	118,877	3,561	0	13,784	17,345	31,370	70,162
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	1,666	0	n/a	0	0	833	833
Conservation Reserve Program	77,872						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	4,564	0.0%	0.0%	10.0%	10.0%	20.0%	70.0%
Small Grain (Spring-Seeded)	2,021	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	77,453	4.6%	0.0%	16.1%	20.7%	34.5%	44.8%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	25,902	0.0%	n/a	0.0%	0.0%	0.0%	100.0%
Other Crops ⁵	8,937	0.0%	0.0%	9.7%	9.7%	19.3%	71.0%
Total Planted Acres	118,877	3.0%	0.0%	11.6%	14.6%	26.4%	59.0%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	1,666	0.0%	n/a	0.0%	0.0%	50.0%	50.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Pennington County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	4,564	0	0	456	456	913	3,195
Cotton	0	0	0	0	0	0	0
Forage Crops ²	25,902	0	n/a	0	0	0	25,902
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	77,453	3,561	0	12,464	16,025	26,708	34,720
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	296	0	0	0	0	0	296
Sugarcane	0	0	0	0	0	0	0
Sunflowers	8,641	0	0	864	864	1,728	6,049
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	2,021	0	0	0	0	2,021	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	118,877	3,561	0	13,784	17,345	31,370	70,162
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	1,666	0	n/a	0	0	833	833
Conservation Reserve Program	77,872						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Pipestone County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	109,509	1,056	0	10,916	11,972	39,085	58,452
Small Grain (Spring-Seeded)	863	0	0	0	0	863	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	81,849	4,876	697	39,705	45,278	28,212	8,359
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	14,243	0	n/a	0	0	14,243	0
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	206,464	5,932	697	50,621	57,250	82,403	66,811
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	11,607						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	109,509	1.0%	0.0%	10.0%	10.9%	35.7%	53.4%
Small Grain (Spring-Seeded)	863	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	81,849	6.0%	0.9%	48.5%	55.3%	34.5%	10.2%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	14,243	0.0%	n/a	0.0%	0.0%	100.0%	0.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	206,464	2.9%	0.3%	24.5%	27.7%	39.9%	32.4%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Pipestone County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	109,509	1,056	0	10,916	11,972	39,085	58,452
Cotton	0	0	0	0	0	0	0
Forage Crops ²	14,243	0	n/a	0	0	14,243	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	81,849	4,876	697	39,705	45,278	28,212	8,359
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	863	0	0	0	0	863	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	206,464	5,932	697	50,621	57,250	82,403	66,811
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	11,607						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Polk County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	53,261	1,110	0	9,986	11,096	27,740	14,425
Small Grain (Spring-Seeded)	160,831	0	0	0	0	160,831	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	207,863	0	0	99,231	99,231	76,251	32,381
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	30,622	0	n/a	0	0	30,622	0
Other Crops ⁵	173,427	0	0	62,082	62,082	77,171	34,174
Total Planted Acres	626,004	1,110	0	171,299	172,409	372,615	80,980
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	5,664	0	n/a	0	0	0	5,664
Conservation Reserve Program	156,565						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	53,261	2.1%	0.0%	18.7%	20.8%	52.1%	27.1%
Small Grain (Spring-Seeded)	160,831	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	207,863	0.0%	0.0%	47.7%	47.7%	36.7%	15.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	30,622	0.0%	n/a	0.0%	0.0%	100.0%	0.0%
Other Crops ⁵	173,427	0.0%	0.0%	35.8%	35.8%	44.5%	19.7%
Total Planted Acres	626,004	0.2%	0.0%	27.4%	27.5%	59.5%	12.9%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	5,664	0.0%	n/a	0.0%	0.0%	0.0%	100.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Polk County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	50,990	0	0	20,396	20,396	20,396	10,198
Canola	0	0	0	0	0	0	0
Corn ¹	53,261	1,110	0	9,986	11,096	27,740	14,425
Cotton	0	0	0	0	0	0	0
Forage Crops ²	30,622	0	n/a	0	0	30,622	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	5,370	0	0	0	0	1,790	3,580
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	207,863	0	0	99,231	99,231	76,251	32,381
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	99,798	0	0	37,258	37,258	46,572	15,968
Sugarcane	0	0	0	0	0	0	0
Sunflowers	17,269	0	0	4,428	4,428	8,413	4,428
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	160,831	0	0	0	0	160,831	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	626,004	1,110	0	171,299	172,409	372,615	80,980
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	5,664	0	n/a	0	0	0	5,664
Conservation Reserve Program	156,565						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Pope County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till ¹ (15-30% residue)	Intensive-Till ² (0-15% residue)
Corn ³	106,158	974	0	4,383	5,357	27,757	73,044
Small Grain (Spring-Seeded)	3,438	0	0	0	0	0	3,438
Small Grain (Fall Seeded)	85	0	0	0	0	85	0
Soybeans (Full Season)	70,230	4,911	0	21,118	26,029	34,870	9,331
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	6,809	0	0	0	0	3,652	3,157
Total Planted Acres	186,720	5,885	0	25,501	31,386	66,364	88,970
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	41,967						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till ¹ (15-30% residue)	Intensive-Till ² (0-15% residue)
Corn ³	106,158	0.9%	0.0%	4.1%	5.0%	26.1%	68.8%
Small Grain (Spring-Seeded)	3,438	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Small Grain (Fall Seeded)	85	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Soybeans (Full Season)	70,230	7.0%	0.0%	30.1%	37.1%	49.7%	13.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	6,809	0.0%	0.0%	0.0%	0.0%	53.6%	46.4%
Total Planted Acres	186,720	3.2%	0.0%	13.7%	16.8%	35.5%	47.6%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Pope County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	3,056	0	0	0	0	1,310	1,746
Canola	487	0	0	0	0	0	487
Corn ¹	106,158	974	0	4,383	5,357	27,757	73,044
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	3,438	0	0	0	0	0	3,438
Peanuts	0	0	0	0	0	0	0
Potatoes	924	0	0	0	0	0	924
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	70,230	4,911	0	21,118	26,029	34,870	9,331
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	2,342	0	0	0	0	2,342	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	85	0	0	0	0	85	0
Total Planted Acres	186,720	5,885	0	25,501	31,386	66,364	88,970
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	41,967						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Red Lake County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	11,887	0	0	3,170	3,170	7,528	1,189
Small Grain (Spring-Seeded)	43,224	0	0	0	0	41,754	1,470
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	58,309	948	0	28,917	29,865	22,281	6,163
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	5,038	802	0	2,963	3,765	1,153	120
Total Planted Acres	118,458	1,750	0	35,050	36,800	72,716	8,942
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	955	0	n/a	0	0	573	382
Conservation Reserve Program	49,228						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	11,887	0.0%	0.0%	26.7%	26.7%	63.3%	10.0%
Small Grain (Spring-Seeded)	43,224	0.0%	0.0%	0.0%	0.0%	96.6%	3.4%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	58,309	1.6%	0.0%	49.6%	51.2%	38.2%	10.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	5,038	15.9%	0.0%	58.8%	74.7%	22.9%	2.4%
Total Planted Acres	118,458	1.5%	0.0%	29.6%	31.1%	61.4%	7.5%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	955	0.0%	n/a	0.0%	0.0%	60.0%	40.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Red Lake County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	1,470	0	0	0	0	0	1,470
Beans	3,207	802	0	2,405	3,207	0	0
Canola	115	0	0	0	0	115	0
Corn ¹	11,887	0	0	3,170	3,170	7,528	1,189
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	600	0	0	0	0	480	120
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	58,309	948	0	28,917	29,865	22,281	6,163
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	1,116	0	0	558	558	558	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	41,754	0	0	0	0	41,754	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	118,458	1,750	0	35,050	36,800	72,716	8,942
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	955	0	n/a	0	0	573	382
Conservation Reserve Program	49,228						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Redwood County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	255,766	894	894	153,818	155,606	99,266	894
Small Grain (Spring-Seeded)	668	0	0	0	0	668	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	192,980	4,071	0	182,395	186,466	6,514	0
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	7,684	0	0	3,800	3,800	1,942	1,942
Total Planted Acres	457,098	4,965	894	340,013	345,872	108,390	2,836
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	310	0	n/a	186	186	0	124
Conservation Reserve Program	17,703						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	255,766	0.3%	0.3%	60.1%	60.8%	38.8%	0.3%
Small Grain (Spring-Seeded)	668	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	192,980	2.1%	0.0%	94.5%	96.6%	3.4%	0.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	7,684	0.0%	0.0%	49.5%	49.5%	25.3%	25.3%
Total Planted Acres	457,098	1.1%	0.2%	74.4%	75.7%	23.7%	0.6%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	310	0.0%	n/a	60.0%	60.0%	0.0%	40.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Redwood County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	3,884	0	0	0	0	1,942	1,942
Canola	0	0	0	0	0	0	0
Corn ¹	255,766	894	894	153,818	155,606	99,266	894
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	192,980	4,071	0	182,395	186,466	6,514	0
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	3,800	0	0	3,800	3,800	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	668	0	0	0	0	668	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	457,098	4,965	894	340,013	345,872	108,390	2,836
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	310	0	n/a	186	186	0	124
Conservation Reserve Program	17,703						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Renville County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	332,278	1,926	0	97,276	99,202	140,616	92,460
Small Grain (Spring-Seeded)	2,470	0	0	0	0	2,470	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	169,500	6,647	0	94,721	101,368	34,897	33,235
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	65,189	0	0	20,537	20,537	23,732	20,920
Total Planted Acres	569,437	8,573	0	212,534	221,107	201,715	146,615
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	13,601						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	332,278	0.6%	0.0%	29.3%	29.9%	42.3%	27.8%
Small Grain (Spring-Seeded)	2,470	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	169,500	3.9%	0.0%	55.9%	59.8%	20.6%	19.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	65,189	0.0%	0.0%	31.5%	31.5%	36.4%	32.1%
Total Planted Acres	569,437	1.5%	0.0%	37.3%	38.8%	35.4%	25.7%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Renville County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	24,499	0	0	4,261	4,261	7,456	12,782
Canola	0	0	0	0	0	0	0
Corn ¹	332,278	1,926	0	97,276	99,202	140,616	92,460
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	169,500	6,647	0	94,721	101,368	34,897	33,235
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	40,690	0	0	16,276	16,276	16,276	8,138
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	2,470	0	0	0	0	2,470	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	569,437	8,573	0	212,534	221,107	201,715	146,615
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	13,601						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Rice County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	89,249	7,286	304	11,232	18,822	24,892	45,535
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	53,852	4,844	855	23,649	29,348	11,397	13,107
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	13,414	0	n/a	5,749	5,749	1,916	5,749
Other Crops ⁵	108	0	0	0	0	108	0
Total Planted Acres	156,623	12,130	1,159	40,630	53,919	38,313	64,391
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	331	331	n/a	0	331	0	0
Conservation Reserve Program	16,835						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	89,249	8.2%	0.3%	12.6%	21.1%	27.9%	51.0%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	53,852	9.0%	1.6%	43.9%	54.5%	21.2%	24.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	13,414	0.0%	n/a	42.9%	42.9%	14.3%	42.9%
Other Crops ⁵	108	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Total Planted Acres	156,623	7.7%	0.7%	25.9%	34.4%	24.5%	41.1%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	331	100.0%	n/a	0.0%	100.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Rice County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	108	0	0	0	0	108	0
Canola	0	0	0	0	0	0	0
Corn ¹	89,249	7,286	304	11,232	18,822	24,892	45,535
Cotton	0	0	0	0	0	0	0
Forage Crops ²	13,414	0	n/a	5,749	5,749	1,916	5,749
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	53,852	4,844	855	23,649	29,348	11,397	13,107
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	156,623	12,130	1,159	40,630	53,919	38,313	64,391
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	331	331	n/a	0	331	0	0
Conservation Reserve Program	16,835						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Rock County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	146,679	2,044	20,443	94,038	116,525	30,154	0
Small Grain (Spring-Seeded)	1,184	0	0	888	888	0	296
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	101,532	7,107	62,950	30,460	100,517	1,015	0
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	249,395	9,151	83,393	125,386	217,930	31,169	296
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	2,711						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	146,679	1.4%	13.9%	64.1%	79.4%	20.6%	0.0%
Small Grain (Spring-Seeded)	1,184	0.0%	0.0%	75.0%	75.0%	0.0%	25.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	101,532	7.0%	62.0%	30.0%	99.0%	1.0%	0.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	249,395	3.7%	33.4%	50.3%	87.4%	12.5%	0.1%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Rock County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	146,679	2,044	20,443	94,038	116,525	30,154	0
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	1,184	0	0	888	888	0	296
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	101,532	7,107	62,950	30,460	100,517	1,015	0
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	249,395	9,151	83,393	125,386	217,930	31,169	296
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	2,711						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Roseau County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	8,838	0	0	0	0	0	8,838
Small Grain (Spring-Seeded)	15,127	0	0	0	0	0	15,127
Small Grain (Fall Seeded)	728	121	0	0	121	0	607
Soybeans (Full Season)	75,019	1,389	0	0	1,389	1,389	72,241
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	31,300	0	0	0	0	0	31,300
Total Planted Acres	131,012	1,510	0	0	1,510	1,389	128,113
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	135,812						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	8,838	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Small Grain (Spring-Seeded)	15,127	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Small Grain (Fall Seeded)	728	16.6%	0.0%	0.0%	16.6%	0.0%	83.4%
Soybeans (Full Season)	75,019	1.9%	0.0%	0.0%	1.9%	1.9%	96.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	31,300	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Planted Acres	131,012	1.2%	0.0%	0.0%	1.2%	1.1%	97.8%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Roseau County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	15,127	0	0	0	0	0	15,127
Beans	0	0	0	0	0	0	0
Canola	16,730	0	0	0	0	0	16,730
Corn ¹	8,838	0	0	0	0	0	8,838
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	728	121	0	0	121	0	607
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	75,019	1,389	0	0	1,389	1,389	72,241
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	14,570	0	0	0	0	0	14,570
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	131,012	1,510	0	0	1,510	1,389	128,113
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	135,812						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Scott County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	40,219	266	0	13,584	13,850	10,388	15,981
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	29,449	561	0	20,474	21,035	5,609	2,805
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	8,785	0	n/a	2,510	2,510	2,510	3,765
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	78,453	827	0	36,568	37,395	18,507	22,551
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	68	0	n/a	14	14	0	54
Conservation Reserve Program	3,527						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	40,219	0.7%	0.0%	33.8%	34.4%	25.8%	39.7%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	29,449	1.9%	0.0%	69.5%	71.4%	19.0%	9.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	8,785	0.0%	n/a	28.6%	28.6%	28.6%	42.9%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	78,453	1.1%	0.0%	46.6%	47.7%	23.6%	28.7%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	68	0.0%	n/a	20.6%	20.6%	0.0%	79.4%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Scott County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	40,219	266	0	13,584	13,850	10,388	15,981
Cotton	0	0	0	0	0	0	0
Forage Crops ²	8,785	0	n/a	2,510	2,510	2,510	3,765
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	29,449	561	0	20,474	21,035	5,609	2,805
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	78,453	827	0	36,568	37,395	18,507	22,551
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	68	0	n/a	14	14	0	54
Conservation Reserve Program	3,527						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Sherburne County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	32,108	345	0	1,036	1,381	5,351	25,376
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	2,733	0	0	0	0	0	2,733
Soybeans (Full Season)	13,509	938	0	1,689	2,627	4,128	6,754
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	5,918	0	0	0	0	1,580	4,338
Total Planted Acres	54,268	1,283	0	2,725	4,008	11,059	39,201
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	1,608						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	32,108	1.1%	0.0%	3.2%	4.3%	16.7%	79.0%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	2,733	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Soybeans (Full Season)	13,509	6.9%	0.0%	12.5%	19.4%	30.6%	50.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	5,918	0.0%	0.0%	0.0%	0.0%	26.7%	73.3%
Total Planted Acres	54,268	2.4%	0.0%	5.0%	7.4%	20.4%	72.2%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Sherburne County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	32,108	345	0	1,036	1,381	5,351	25,376
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	5,794	0	0	0	0	1,580	4,214
Rice	0	0	0	0	0	0	0
Rye	2,733	0	0	0	0	0	2,733
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	13,509	938	0	1,689	2,627	4,128	6,754
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	124	0	0	0	0	0	124
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	54,268	1,283	0	2,725	4,008	11,059	39,201
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	1,608						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Sibley County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	167,798	0	0	28,519	28,519	58,365	80,914
Small Grain (Spring-Seeded)	505	0	0	0	0	505	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	93,048	585	0	53,839	54,424	11,119	27,505
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	2,039	0	0	2,000	2,000	18	21
Total Planted Acres	263,390	585	0	84,358	84,943	70,007	108,440
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	4,263						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	167,798	0.0%	0.0%	17.0%	17.0%	34.8%	48.2%
Small Grain (Spring-Seeded)	505	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	93,048	0.6%	0.0%	57.9%	58.5%	11.9%	29.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	2,039	0.0%	0.0%	98.1%	98.1%	0.9%	1.0%
Total Planted Acres	263,390	0.2%	0.0%	32.0%	32.2%	26.6%	41.2%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Sibley County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	167,798	0	0	28,519	28,519	58,365	80,914
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	93,048	585	0	53,839	54,424	11,119	27,505
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	1,988	0	0	1,988	1,988	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	51	0	0	12	12	18	21
Spring Wheat	505	0	0	0	0	505	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	263,390	585	0	84,358	84,943	70,007	108,440
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	4,263						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Stearns County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	221,797	760	0	5,317	6,077	18,230	197,490
Small Grain (Spring-Seeded)	29,171	0	0	2,371	2,371	5,217	21,583
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	75,575	1,482	741	9,632	11,855	16,300	47,420
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	93,190	0	n/a	0	0	0	93,190
Other Crops ⁵	5,752	0	0	0	0	1,269	4,483
Total Planted Acres	425,485	2,242	741	17,320	20,303	41,016	364,166
Newly Established Permanent Pasture	10,771	0	n/a	0	0	10,771	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	34,341						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	221,797	0.3%	0.0%	2.4%	2.7%	8.2%	89.0%
Small Grain (Spring-Seeded)	29,171	0.0%	0.0%	8.1%	8.1%	17.9%	74.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	75,575	2.0%	1.0%	12.7%	15.7%	21.6%	62.7%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	93,190	0.0%	n/a	0.0%	0.0%	0.0%	100.0%
Other Crops ⁵	5,752	0.0%	0.0%	0.0%	0.0%	22.1%	77.9%
Total Planted Acres	425,485	0.5%	0.2%	4.1%	4.8%	9.6%	85.6%
Newly Established Permanent Pasture	10,771	0.0%	n/a	0.0%	0.0%	100.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Stearns County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	7,113	0	0	2,371	2,371	2,371	2,371
Beans	2,752	0	0	0	0	0	2,752
Canola	0	0	0	0	0	0	0
Corn ¹	221,797	760	0	5,317	6,077	18,230	197,490
Cotton	0	0	0	0	0	0	0
Forage Crops ²	93,190	0	n/a	0	0	0	93,190
Oats	22,058	0	0	0	0	2,846	19,212
Peanuts	0	0	0	0	0	0	0
Potatoes	462	0	0	0	0	0	462
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	75,575	1,482	741	9,632	11,855	16,300	47,420
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	2,538	0	0	0	0	1,269	1,269
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	425,485	2,242	741	17,320	20,303	41,016	364,166
Newly Established Permanent Pasture	10,771	0	n/a	0	0	10,771	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	34,341						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Steele County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	124,841	1,486	0	32,201	33,687	60,439	30,715
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	72,258	11,229	0	41,500	52,729	15,135	4,394
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	8,464	0	n/a	4,232	4,232	0	4,232
Other Crops ⁵	3,743	0	0	0	0	0	3,743
Total Planted Acres	209,306	12,715	0	77,933	90,648	75,574	43,084
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	12,035						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	124,841	1.2%	0.0%	25.8%	27.0%	48.4%	24.6%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	72,258	15.5%	0.0%	57.4%	73.0%	20.9%	6.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	8,464	0.0%	n/a	50.0%	50.0%	0.0%	50.0%
Other Crops ⁵	3,743	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Planted Acres	209,306	6.1%	0.0%	37.2%	43.3%	36.1%	20.6%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Steele County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	3,743	0	0	0	0	0	3,743
Canola	0	0	0	0	0	0	0
Corn ¹	124,841	1,486	0	32,201	33,687	60,439	30,715
Cotton	0	0	0	0	0	0	0
Forage Crops ²	8,464	0	n/a	4,232	4,232	0	4,232
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	72,258	11,229	0	41,500	52,729	15,135	4,394
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	209,306	12,715	0	77,933	90,648	75,574	43,084
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	12,035						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Stevens County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	168,302	418	0	0	418	25,475	142,409
Small Grain (Spring-Seeded)	686	0	0	0	0	686	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	102,513	1,480	0	0	1,480	55,883	45,150
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	9,084	0	n/a	0	0	0	9,084
Other Crops ⁵	5,360	0	0	0	0	0	5,360
Total Planted Acres	285,945	1,898	0	0	1,898	82,044	202,003
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	15,921						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	168,302	0.2%	0.0%	0.0%	0.2%	15.1%	84.6%
Small Grain (Spring-Seeded)	686	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	102,513	1.4%	0.0%	0.0%	1.4%	54.5%	44.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	9,084	0.0%	n/a	0.0%	0.0%	0.0%	100.0%
Other Crops ⁵	5,360	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Planted Acres	285,945	0.7%	0.0%	0.0%	0.7%	28.7%	70.6%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Stevens County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	168,302	418	0	0	418	25,475	142,409
Cotton	0	0	0	0	0	0	0
Forage Crops ²	9,084	0	n/a	0	0	0	9,084
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	102,513	1,480	0	0	1,480	55,883	45,150
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	5,360	0	0	0	0	0	5,360
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	686	0	0	0	0	686	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	285,945	1,898	0	0	1,898	82,044	202,003
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	15,921						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Swift County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	185,721	2,591	0	76,880	79,471	73,425	32,825
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	115,578	9,293	1,742	85,958	96,993	9,873	8,712
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	5,223	0	0	5,223	5,223	0	0
Total Planted Acres	306,522	11,884	1,742	168,061	181,687	83,298	41,537
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	37,553						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	185,721	1.4%	0.0%	41.4%	42.8%	39.5%	17.7%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	115,578	8.0%	1.5%	74.4%	83.9%	8.5%	7.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	5,223	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Total Planted Acres	306,522	3.9%	0.6%	54.8%	59.3%	27.2%	13.6%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Swift County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	185,721	2,591	0	76,880	79,471	73,425	32,825
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	115,578	9,293	1,742	85,958	96,993	9,873	8,712
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	5,223	0	0	5,223	5,223	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	306,522	11,884	1,742	168,061	181,687	83,298	41,537
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	37,553						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Todd County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	72,179	1,349	0	1,686	3,035	9,444	59,700
Small Grain (Spring-Seeded)	11,231	216	0	216	432	864	9,935
Small Grain (Fall Seeded)	918	0	0	0	0	0	918
Soybeans (Full Season)	31,991	2,935	0	2,935	5,870	5,283	20,838
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	53,897	0	n/a	0	0	5,390	48,507
Other Crops ⁵	2,443	0	0	0	0	0	2,443
Total Planted Acres	172,659	4,500	0	4,837	9,337	20,981	142,341
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	1,034	0	n/a	148	148	0	886
Conservation Reserve Program	16,819						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	72,179	1.9%	0.0%	2.3%	4.2%	13.1%	82.7%
Small Grain (Spring-Seeded)	11,231	1.9%	0.0%	1.9%	3.8%	7.7%	88.5%
Small Grain (Fall Seeded)	918	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Soybeans (Full Season)	31,991	9.2%	0.0%	9.2%	18.3%	16.5%	65.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	53,897	0.0%	n/a	0.0%	0.0%	10.0%	90.0%
Other Crops ⁵	2,443	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Planted Acres	172,659	2.6%	0.0%	2.8%	5.4%	12.2%	82.4%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	1,034	0.0%	n/a	14.3%	14.3%	0.0%	85.7%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Todd County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	442	0	0	0	0	0	442
Canola	0	0	0	0	0	0	0
Corn ¹	72,179	1,349	0	1,686	3,035	9,444	59,700
Cotton	0	0	0	0	0	0	0
Forage Crops ²	53,897	0	n/a	0	0	5,390	48,507
Oats	11,231	216	0	216	432	864	9,935
Peanuts	0	0	0	0	0	0	0
Potatoes	2,001	0	0	0	0	0	2,001
Rice	0	0	0	0	0	0	0
Rye	918	0	0	0	0	0	918
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	31,991	2,935	0	2,935	5,870	5,283	20,838
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	172,659	4,500	0	4,837	9,337	20,981	142,341
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	1,034	0	n/a	148	148	0	886
Conservation Reserve Program	16,819						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Traverse County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	145,192	864	0	94,202	95,066	32,841	17,285
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	125,854	1,893	0	104,090	105,983	8,516	11,355
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	5,749	0	0	4,703	4,703	523	523
Total Planted Acres	276,795	2,757	0	202,995	205,752	41,880	29,163
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	15,972						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	145,192	0.6%	0.0%	64.9%	65.5%	22.6%	11.9%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	125,854	1.5%	0.0%	82.7%	84.2%	6.8%	9.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	5,749	0.0%	0.0%	81.8%	81.8%	9.1%	9.1%
Total Planted Acres	276,795	1.0%	0.0%	73.3%	74.3%	15.1%	10.5%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Traverse County, MN

Annual Crop	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	145,192	864	0	94,202	95,066	32,841	17,285
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	125,854	1,893	0	104,090	105,983	8,516	11,355
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	5,749	0	0	4,703	4,703	523	523
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	276,795	2,757	0	202,995	205,752	41,880	29,163
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	15,972						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Wabasha County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	93,575	2,773	0	19,408	22,181	30,845	40,549
Small Grain (Spring-Seeded)	6,024	0	0	0	0	0	6,024
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	32,388	5,552	0	16,040	21,592	7,403	3,393
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	29,522	0	n/a	0	0	9,841	19,681
Other Crops ⁵	1,638	0	0	819	819	0	819
Total Planted Acres	163,147	8,325	0	36,267	44,592	48,089	70,466
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	11,714						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	93,575	3.0%	0.0%	20.7%	23.7%	33.0%	43.3%
Small Grain (Spring-Seeded)	6,024	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	32,388	17.1%	0.0%	49.5%	66.7%	22.9%	10.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	29,522	0.0%	n/a	0.0%	0.0%	33.3%	66.7%
Other Crops ⁵	1,638	0.0%	0.0%	50.0%	50.0%	0.0%	50.0%
Total Planted Acres	163,147	5.1%	0.0%	22.2%	27.3%	29.5%	43.2%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Wabasha County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	1,638	0	0	819	819	0	819
Canola	0	0	0	0	0	0	0
Corn ¹	93,575	2,773	0	19,408	22,181	30,845	40,549
Cotton	0	0	0	0	0	0	0
Forage Crops ²	29,522	0	n/a	0	0	9,841	19,681
Oats	6,024	0	0	0	0	0	6,024
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	32,388	5,552	0	16,040	21,592	7,403	3,393
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	163,147	8,325	0	36,267	44,592	48,089	70,466
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	11,714						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Wadena County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	22,913	537	0	1,969	2,506	7,876	12,531
Small Grain (Spring-Seeded)	4,344	0	0	658	658	658	3,028
Small Grain (Fall Seeded)	473	0	0	0	0	0	473
Soybeans (Full Season)	6,559	168	168	2,018	2,354	2,018	2,187
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	24,368	0	n/a	0	0	12,184	12,184
Other Crops ⁵	6,689	0	0	0	0	0	6,689
Total Planted Acres	65,346	705	168	4,645	5,518	22,736	37,092
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	4,689						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	22,913	2.3%	0.0%	8.6%	10.9%	34.4%	54.7%
Small Grain (Spring-Seeded)	4,344	0.0%	0.0%	15.1%	15.1%	15.1%	69.7%
Small Grain (Fall Seeded)	473	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Soybeans (Full Season)	6,559	2.6%	2.6%	30.8%	35.9%	30.8%	33.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	24,368	0.0%	n/a	0.0%	0.0%	50.0%	50.0%
Other Crops ⁵	6,689	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Planted Acres	65,346	1.1%	0.3%	7.1%	8.4%	34.8%	56.8%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Wadena County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	2,103	0	0	0	0	0	2,103
Canola	0	0	0	0	0	0	0
Corn ¹	22,913	537	0	1,969	2,506	7,876	12,531
Cotton	0	0	0	0	0	0	0
Forage Crops ²	24,368	0	n/a	0	0	12,184	12,184
Oats	4,344	0	0	658	658	658	3,028
Peanuts	0	0	0	0	0	0	0
Potatoes	4,586	0	0	0	0	0	4,586
Rice	0	0	0	0	0	0	0
Rye	473	0	0	0	0	0	473
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	6,559	168	168	2,018	2,354	2,018	2,187
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	65,346	705	168	4,645	5,518	22,736	37,092
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	4,689						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Waseca County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	139,411	313	0	16,291	16,604	82,080	40,727
Small Grain (Spring-Seeded)	565	0	0	0	0	0	565
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	82,425	10,663	0	39,772	50,435	25,938	6,052
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	4,096	0	n/a	0	0	2,048	2,048
Other Crops ⁵	1,542	0	0	1,522	1,522	0	20
Total Planted Acres	228,039	10,976	0	57,585	68,561	110,066	49,412
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	9,734						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	139,411	0.2%	0.0%	11.7%	11.9%	58.9%	29.2%
Small Grain (Spring-Seeded)	565	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	82,425	12.9%	0.0%	48.3%	61.2%	31.5%	7.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	4,096	0.0%	n/a	0.0%	0.0%	50.0%	50.0%
Other Crops ⁵	1,542	0.0%	0.0%	98.7%	98.7%	0.0%	1.3%
Total Planted Acres	228,039	4.8%	0.0%	25.3%	30.1%	48.3%	21.7%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Waseca County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	1,522	0	0	1,522	1,522	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	139,411	313	0	16,291	16,604	82,080	40,727
Cotton	0	0	0	0	0	0	0
Forage Crops ²	4,096	0	n/a	0	0	2,048	2,048
Oats	565	0	0	0	0	0	565
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	82,425	10,663	0	39,772	50,435	25,938	6,052
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	20	0	0	0	0	0	20
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	228,039	10,976	0	57,585	68,561	110,066	49,412
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	9,734						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Watonwan County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	137,580	844	3,798	18,991	23,633	50,643	63,304
Small Grain (Spring-Seeded)	169	0	0	169	169	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	94,296	2,439	2,032	62,999	67,470	19,510	7,316
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	1,474	0	n/a	0	0	0	1,474
Other Crops ⁵	991	0	0	0	0	991	0
Total Planted Acres	234,510	3,283	5,830	82,159	91,272	71,144	72,094
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	6,672						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	137,580	0.6%	2.8%	13.8%	17.2%	36.8%	46.0%
Small Grain (Spring-Seeded)	169	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	94,296	2.6%	2.2%	66.8%	71.6%	20.7%	7.8%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	1,474	0.0%	n/a	0.0%	0.0%	0.0%	100.0%
Other Crops ⁵	991	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Total Planted Acres	234,510	1.4%	2.5%	35.0%	38.9%	30.3%	30.7%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Watonwan County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	991	0	0	0	0	991	0
Canola	0	0	0	0	0	0	0
Corn ¹	137,580	844	3,798	18,991	23,633	50,643	63,304
Cotton	0	0	0	0	0	0	0
Forage Crops ²	1,474	0	n/a	0	0	0	1,474
Oats	169	0	0	169	169	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	94,296	2,439	2,032	62,999	67,470	19,510	7,316
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	234,510	3,283	5,830	82,159	91,272	71,144	72,094
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	6,672						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Wilkin County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	82,346	0	0	992	992	7,937	73,417
Small Grain (Spring-Seeded)	9,522	0	0	0	0	9,522	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	133,864	0	0	4,098	4,098	12,294	117,472
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	51,155	0	0	0	0	1,248	49,907
Total Planted Acres	276,887	0	0	5,090	5,090	31,001	240,796
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	16,124						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	82,346	0.0%	0.0%	1.2%	1.2%	9.6%	89.2%
Small Grain (Spring-Seeded)	9,522	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	133,864	0.0%	0.0%	3.1%	3.1%	9.2%	87.8%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	51,155	0.0%	0.0%	0.0%	0.0%	2.4%	97.6%
Total Planted Acres	276,887	0.0%	0.0%	1.8%	1.8%	11.2%	87.0%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Wilkin County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	82,346	0	0	992	992	7,937	73,417
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	133,864	0	0	4,098	4,098	12,294	117,472
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	51,155	0	0	0	0	1,248	49,907
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	9,522	0	0	0	0	9,522	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	276,887	0	0	5,090	5,090	31,001	240,796
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	16,124						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Winona County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	83,925	11,826	0	42,344	54,170	19,837	9,918
Small Grain (Spring-Seeded)	6,364	289	0	3,471	3,760	2,025	579
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	25,230	5,046	459	15,597	21,102	1,376	2,752
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	40,040	0	n/a	17,160	17,160	11,440	11,440
Other Crops ⁵	1,402	0	0	0	0	1,402	0
Total Planted Acres	156,961	17,161	459	78,572	96,192	36,080	24,689
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	11,131						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	83,925	14.1%	0.0%	50.5%	64.5%	23.6%	11.8%
Small Grain (Spring-Seeded)	6,364	4.5%	0.0%	54.5%	59.1%	31.8%	9.1%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	25,230	20.0%	1.8%	61.8%	83.6%	5.5%	10.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	40,040	0.0%	n/a	42.9%	42.9%	28.6%	28.6%
Other Crops ⁵	1,402	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Total Planted Acres	156,961	10.9%	0.3%	50.1%	61.3%	23.0%	15.7%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Winona County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	1,402	0	0	0	0	1,402	0
Canola	0	0	0	0	0	0	0
Corn ¹	83,925	11,826	0	42,344	54,170	19,837	9,918
Cotton	0	0	0	0	0	0	0
Forage Crops ²	40,040	0	n/a	17,160	17,160	11,440	11,440
Oats	6,364	289	0	3,471	3,760	2,025	579
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	25,230	5,046	459	15,597	21,102	1,376	2,752
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	156,961	17,161	459	78,572	96,192	36,080	24,689
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	11,131						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Wright County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	81,716	0	0	1,066	1,066	17,764	62,886
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	66,244	0	0	7,618	7,618	29,810	28,816
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	21,314	0	n/a	0	0	0	21,314
Other Crops ⁵	0	0	0	0	0	0	0
Total Planted Acres	169,274	0	0	8,684	8,684	47,574	113,016
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	115	0	n/a	33	33	49	33
Conservation Reserve Program	8,651						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	81,716	0.0%	0.0%	1.3%	1.3%	21.7%	77.0%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	66,244	0.0%	0.0%	11.5%	11.5%	45.0%	43.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	21,314	0.0%	n/a	0.0%	0.0%	0.0%	100.0%
Other Crops ⁵	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Planted Acres	169,274	0.0%	0.0%	5.1%	5.1%	28.1%	66.8%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	115	0.0%	n/a	28.7%	28.7%	42.6%	28.7%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Wright County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			= Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till	(0-15% residue) Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	0	0	0	0	0	0	0
Canola	0	0	0	0	0	0	0
Corn ¹	81,716	0	0	1,066	1,066	17,764	62,886
Cotton	0	0	0	0	0	0	0
Forage Crops ²	21,314	0	n/a	0	0	0	21,314
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	66,244	0	0	7,618	7,618	29,810	28,816
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	0	0	0	0	0	0	0
Sugarcane	0	0	0	0	0	0	0
Sunflowers	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	169,274	0	0	8,684	8,684	47,574	113,016
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	115	0	n/a	33	33	49	33
Conservation Reserve Program	8,651						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

2007 Summary for Yellow Medicine County, Minnesota

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	207,036	726	0	5,085	5,811	52,304	148,921
Small Grain (Spring-Seeded)	0	0	0	0	0	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	147,521	7,067	0	80,386	87,453	52,118	7,950
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum ³	0	0	0	0	0	0	0
Forage Crops ⁴	0	0	n/a	0	0	0	0
Other Crops ⁵	7,444	194	0	0	194	2,799	4,451
Total Planted Acres	362,001	7,987	0	85,471	93,458	107,221	161,322
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	24,700						
Highly Erodible Land	0						
Treated Highly Erodible Land	0						

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduced-Till ¹	(0-15% residue) Intensive-Till ²
Corn ³	207,036	0.4%	0.0%	2.5%	2.8%	25.3%	71.9%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	147,521	4.8%	0.0%	54.5%	59.3%	35.3%	5.4%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum ³	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops ⁴	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Other Crops ⁵	7,444	2.6%	0.0%	0.0%	2.6%	37.6%	59.8%
Total Planted Acres	362,001	2.2%	0.0%	23.6%	25.8%	29.6%	44.6%
Newly Established Permanent Pasture	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%
Fallow	0	0.0%	n/a	0.0%	0.0%	0.0%	0.0%

¹ Reduced-Till = 500-1000 lbs. Small Grain Equivalent (SGE)

² Intensive-Till < 500 lbs. Small Grain Equivalent (SGE)

³ Includes Full Season and Double Cropped.

⁴ Forage Crops reported in seeding year only.

⁵ Other Crops include other vegetable crops, truck crops, peanuts, tobacco, sugar beets, etc.

n/a means Not Applicable

2007 Tillage Transect Survey - Yellow Medicine County, MN

— Annual Crop —	Total Acres	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices (15-30% residue) (0-15% residue)	
		No-Till	Ridge-Till	Mulch-Till		Reduced-Till	Intensive-Till
Barley	0	0	0	0	0	0	0
Beans	25	0	0	0	0	25	0
Canola	0	0	0	0	0	0	0
Corn ¹	207,036	726	0	5,085	5,811	52,304	148,921
Cotton	0	0	0	0	0	0	0
Forage Crops ²	0	0	n/a	0	0	0	0
Oats	0	0	0	0	0	0	0
Peanuts	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0
Rye	0	0	0	0	0	0	0
Sorghum ¹	0	0	0	0	0	0	0
Soybeans (Full Season)	147,521	7,067	0	80,386	87,453	52,118	7,950
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Sugar Beets	3,875	194	0	0	194	1,356	2,325
Sugarcane	0	0	0	0	0	0	0
Sunflowers	3,544	0	0	0	0	1,418	2,126
Tobacco	0	0	0	0	0	0	0
Other Crops (incl. vegetables)	0	0	0	0	0	0	0
Spring Wheat	0	0	0	0	0	0	0
Winter Wheat	0	0	0	0	0	0	0
Total Planted Acres	362,001	7,987	0	85,471	93,458	107,221	161,322
Newly Established Permanent Pasture	0	0	n/a	0	0	0	0
Fallow	0	0	n/a	0	0	0	0
Conservation Reserve Program	24,700						

¹ Includes Full Season and Double Cropped.

² Forage Crops reported in seeding year only.

n/a means Not Applicable

Note: Data was collected in cooperation with the USDA Natural Resources Conservation Service and Local Conservation Partnerships.

Exhibit E

2007 Major Watershed Summaries

2007 Elk-Nokasippi Watershed Summary (10)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	101	4	0	16		20	36	45
Small Grain (Spring-Seeded)	7	0	0	0		0	2	5
Small Grain (Fall Seeded)	3	0	0	0		0	2	1
Soybeans (Full Season)	22	1	0	1		2	5	15
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	2	0	0	0		0	1	1
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Total Points	135	5	0	17		22	46	67

Perm. Pasture	25
Fallow	3
Forages	69
Conservation Reserve Program	2

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	101	4.0%	0.0%	15.8%		19.8%	35.6%	44.6%
Small Grain (Spring-Seeded)	7	0.0%	0.0%	0.0%		0.0%	28.6%	71.4%
Small Grain (Fall Seeded)	3	0.0%	0.0%	0.0%		0.0%	66.7%	33.3%
Soybeans (Full Season)	22	4.5%	0.0%	4.5%		9.1%	22.7%	68.2%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	2	0.0%	0.0%	0.0%		0.0%	50.0%	50.0%
Total Points	135	3.7%	0.0%	12.6%		16.3%	34.1%	49.6%

Perm. Pasture	25
Fallow	3
Forages	69
Conservation Reserve Program	2

2007 Crow Wing River Watershed Summary (12)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue)	(0-15% residue)
							Reduce-Till	Intensive-Till
Corn	66	2	0	3		5	17	44
Small Grain (Spring-Seeded)	38	1	0	1		2	7	29
Small Grain (Fall Seeded)	2	0	0	0		0	0	2
Soybeans (Full Season)	20	1	0	4		5	7	8
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	23	0	0	1		1	0	22
Total Points	149	4	0	9		13	31	105

Perm. Pasture	28
Fallow	10
Forages	64
Conservation Reserve Program	35

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till				
Corn	66	3.0%	0.0%	4.5%		7.6%	25.8%	66.7%
Small Grain (Spring-Seeded)	38	2.6%	0.0%	2.6%		5.3%	18.4%	76.3%
Small Grain (Fall Seeded)	2	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Soybeans (Full Season)	20	5.0%	0.0%	20.0%		25.0%	35.0%	40.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	23	0.0%	0.0%	4.3%		4.3%	0.0%	95.7%
Total Points	149	2.7%	0.0%	6.0%		8.7%	20.8%	70.5%

Perm. Pasture	28
Fallow	10
Forages	64
Conservation Reserve Program	35

2007 Redeye River Watershed Summary (13)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	240	2	0	28		30	97	113
Small Grain (Spring-Seeded)	60	0	0	6		6	22	32
Small Grain (Fall Seeded)	3	0	0	0		0	0	3
Soybeans (Full Season)	83	20	1	19		40	17	26
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	18	1	1	2		4	4	10
Total Points	404	23	2	55		80	140	184

Perm. Pasture	55
Fallow	29
Forages	148
Conservation Reserve Program	8

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	240	0.8%	0.0%	11.7%		12.5%	40.4%	47.1%
Small Grain (Spring-Seeded)	60	0.0%	0.0%	10.0%		10.0%	36.7%	53.3%
Small Grain (Fall Seeded)	3	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Soybeans (Full Season)	83	24.1%	1.2%	22.9%		48.2%	20.5%	31.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	18	5.6%	5.6%	11.1%		22.2%	22.2%	55.6%
Total Points	404	5.7%	0.5%	13.6%		19.8%	34.7%	45.5%

Perm. Pasture	55
Fallow	29
Forages	148
Conservation Reserve Program	8

2007 Long Prairie River Watershed Summary (14)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	143	4	0	2		6	21	116
Small Grain (Spring-Seeded)	62	0	0	2		2	4	56
Small Grain (Fall Seeded)	3	0	0	0		0	0	3
Soybeans (Full Season)	96	10	0	12		22	18	56
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	11	0	0	4		4	0	7
Total Points	315	14	0	20		34	43	238

Perm. Pasture	38
Fallow	8
Forages	39
Conservation Reserve Program	52

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till				
Corn	143	2.8%	0.0%	1.4%		4.2%	14.7%	81.1%
Small Grain (Spring-Seeded)	62	0.0%	0.0%	3.2%		3.2%	6.5%	90.3%
Small Grain (Fall Seeded)	3	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Soybeans (Full Season)	96	10.4%	0.0%	12.5%		22.9%	18.8%	58.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	11	0.0%	0.0%	36.4%		36.4%	0.0%	63.6%
Total Points	315	4.4%	0.0%	6.3%		10.8%	13.7%	75.6%

Perm. Pasture	38
Fallow	8
Forages	39
Conservation Reserve Program	52

2007 Platte-Spunk Watershed Summary (15)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	292	13	1	35		49	68	175
Small Grain (Spring-Seeded)	21	0	0	2		2	4	15
Small Grain (Fall Seeded)	1	0	0	0		0	1	0
Soybeans (Full Season)	68	6	0	16		22	16	30
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	18	0	0	1		1	6	11
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Total Points	400	19	1	54		74	95	231

Perm. Pasture	41
Fallow	3
Forages	161
Conservation Reserve Program	15

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	292	4.5%	0.3%	12.0%		16.8%	23.3%	59.9%
Small Grain (Spring-Seeded)	21	0.0%	0.0%	9.5%		9.5%	19.0%	71.4%
Small Grain (Fall Seeded)	1	0.0%	0.0%	0.0%		0.0%	100.0%	0.0%
Soybeans (Full Season)	68	8.8%	0.0%	23.5%		32.4%	23.5%	44.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	18	0.0%	0.0%	5.6%		5.6%	33.3%	61.1%
Total Points	400	4.8%	0.3%	13.5%		18.5%	23.8%	57.8%

Perm. Pasture	41
Fallow	3
Forages	161
Conservation Reserve Program	15

2007 Sauk River Watershed Summary (16)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	250	0	0	10		10	18	222
Small Grain (Spring-Seeded)	40	0	0	1		1	5	34
Small Grain (Fall Seeded)	1	0	0	0		0	0	1
Soybeans (Full Season)	114	2	0	14		16	31	67
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	5	0	0	0		0	3	2
Total Points	410	2	0	25		27	57	326

Perm. Pasture	45
Fallow	1
Forages	74
Conservation Reserve Program	24

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	250	0.0%	0.0%	4.0%		4.0%	7.2%	88.8%
Small Grain (Spring-Seeded)	40	0.0%	0.0%	2.5%		2.5%	12.5%	85.0%
Small Grain (Fall Seeded)	1	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Soybeans (Full Season)	114	1.8%	0.0%	12.3%		14.0%	27.2%	58.8%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	5	0.0%	0.0%	0.0%		0.0%	60.0%	40.0%
Total Points	410	0.5%	0.0%	6.1%		6.6%	13.9%	79.5%

Perm. Pasture	45
Fallow	1
Forages	74
Conservation Reserve Program	24

2007 Clearwater-Elk Watershed Summary (17)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	460	10	0	34		44	81	335
Small Grain (Spring-Seeded)	7	0	0	0		0	3	4
Small Grain (Fall Seeded)	2	0	0	0		0	0	2
Soybeans (Full Season)	208	7	0	48		55	59	94
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	12	0	0	0		0	3	9
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Total Points	689	17	0	82		99	146	444

Perm. Pasture	65
Fallow	14
Forages	39
Conservation Reserve Program	11

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	460	2.2%	0.0%	7.4%		9.6%	17.6%	72.8%
Small Grain (Spring-Seeded)	7	0.0%	0.0%	0.0%		0.0%	42.9%	57.1%
Small Grain (Fall Seeded)	2	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Soybeans (Full Season)	208	3.4%	0.0%	23.1%		26.4%	28.4%	45.2%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	12	0.0%	0.0%	0.0%		0.0%	25.0%	75.0%
Total Points	689	2.5%	0.0%	11.9%		14.4%	21.2%	64.4%

Perm. Pasture	65
Fallow	14
Forages	39
Conservation Reserve Program	11

2007 Crow River Watershed Summary (18)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	465	2	0	8		10	93	362
Small Grain (Spring-Seeded)	17	0	0	1		1	6	10
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	352	2	3	49		54	180	118
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	17	0	0	0		0	2	15
Total Points	851	4	3	58		65	281	505

Perm. Pasture	30
Fallow	9
Forages	65
Conservation Reserve Program	105

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	465	0.4%	0.0%	1.7%		2.2%	20.0%	77.8%
Small Grain (Spring-Seeded)	17	0.0%	0.0%	5.9%		5.9%	35.3%	58.8%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	352	0.6%	0.9%	13.9%		15.3%	51.1%	33.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	17	0.0%	0.0%	0.0%		0.0%	11.8%	88.2%
Total Points	851	0.5%	0.4%	6.8%		7.6%	33.0%	59.3%

Perm. Pasture	30
Fallow	9
Forages	65
Conservation Reserve Program	105

2007 South Fork Crow River Watershed Summary (19)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue)	(0-15% residue)
							Reduce-Till	Intensive-Till
Corn	690	2	2	95	99	271	320	
Small Grain (Spring-Seeded)	16	0	0	1	1	5	10	
Small Grain (Fall Seeded)	0	0	0	0	0	0	0	
Soybeans (Full Season)	408	8	0	148	156	86	166	
Soybeans (Double-Cropped)	0	0	0	0	0	0	0	
Cotton	0	0	0	0	0	0	0	
Grain Sorghum	0	0	0	0	0	0	0	
Forage Crops	0	0	0	0	0	0	0	
Other Crops	52	0	0	16	16	20	16	
Total Points	1166	10	2	260	272	382	512	

Perm. Pasture	14
Fallow	0
Forages	101
Conservation Reserve Program	27

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	690	0.3%	0.3%	13.8%		14.3%	39.3%	46.4%
Small Grain (Spring-Seeded)	16	0.0%	0.0%	6.3%		6.3%	31.3%	62.5%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	408	2.0%	0.0%	36.3%		38.2%	21.1%	40.7%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	52	0.0%	0.0%	30.8%		30.8%	38.5%	30.8%
Total Points	1166	0.9%	0.2%	22.3%		23.3%	32.8%	43.9%

Perm. Pasture	14
Fallow	0
Forages	101
Conservation Reserve Program	27

2007 Twin Cities - Mississippi River Watershed Summary (20)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	7	0	0	0		0	0	7
Small Grain (Spring-Seeded)	0	0	0	0		0	0	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	1	0	0	0		0	0	1
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
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Total Points	8	0	0	0		0	0	8

Perm. Pasture	0
Fallow	0
Forages	1
Conservation Reserve Program	0

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	7	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	1	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	8	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%

Perm. Pasture	0
Fallow	0
Forages	1
Conservation Reserve Program	0

2007 Rum River Watershed Summary (21)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	229	33	0	13		46	26	157
Small Grain (Spring-Seeded)	3	0	0	0		0	1	2
Small Grain (Fall Seeded)	7	0	0	0		0	0	7
Soybeans (Full Season)	186	49	0	49		98	30	58
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
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Total Points	425	82	0	62		144	57	224

Perm. Pasture	32
Fallow	2
Forages	78
Conservation Reserve Program	10

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	229	14.4%	0.0%	5.7%		20.1%	11.4%	68.6%
Small Grain (Spring-Seeded)	3	0.0%	0.0%	0.0%		0.0%	33.3%	66.7%
Small Grain (Fall Seeded)	7	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Soybeans (Full Season)	186	26.3%	0.0%	26.3%		52.7%	16.1%	31.2%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	425	19.3%	0.0%	14.6%		33.9%	13.4%	52.7%

Perm. Pasture	32
Fallow	2
Forages	78
Conservation Reserve Program	10

2007 Upper Minnesota River Watershed Summary (22)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	206	9	0	74		83	89	34
Small Grain (Spring-Seeded)	19	5	0	3		8	8	3
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	246	45	1	133		179	47	20
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	471	59	1	210		270	144	57

Perm. Pasture	4
Fallow	0
Forages	11
Conservation Reserve Program	55

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	206	4.4%	0.0%	35.9%		40.3%	43.2%	16.5%
Small Grain (Spring-Seeded)	19	26.3%	0.0%	15.8%		42.1%	42.1%	15.8%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	246	18.3%	0.4%	54.1%		72.8%	19.1%	8.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	471	12.5%	0.2%	44.6%		57.3%	30.6%	12.1%

Perm. Pasture	4
Fallow	0
Forages	11
Conservation Reserve Program	55

2007 Pomme de Terre River Watershed Summary (23)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	352	1	0	43		44	67	241
Small Grain (Spring-Seeded)	60	1	0	5		6	7	47
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	296	11	2	69		82	114	100
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	6	0	0	2		2	0	4
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Total Points	714	13	2	119		134	188	392

Perm. Pasture	22
Fallow	1
Forages	31
Conservation Reserve Program	91

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	352	0.3%	0.0%	12.2%		12.5%	19.0%	68.5%
Small Grain (Spring-Seeded)	60	1.7%	0.0%	8.3%		10.0%	11.7%	78.3%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	296	3.7%	0.7%	23.3%		27.7%	38.5%	33.8%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	6	0.0%	0.0%	33.3%		33.3%	0.0%	66.7%
Total Points	714	1.8%	0.3%	16.7%		18.8%	26.3%	54.9%

Perm. Pasture	22
Fallow	1
Forages	31
Conservation Reserve Program	91

2007 Lac qui Parle River Watershed Summary (24)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	254	0	3	50		53	89	112
Small Grain (Spring-Seeded)	7	0	0	1		1	4	2
Small Grain (Fall Seeded)	1	0	0	0		0	1	0
Soybeans (Full Season)	217	15	0	125		140	51	26
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	12	0	0	0		0	6	6
Total Points	491	15	3	176		194	151	146

Perm. Pasture	36
Fallow	0
Forages	11
Conservation Reserve Program	60

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	254	0.0%	1.2%	19.7%		20.9%	35.0%	44.1%
Small Grain (Spring-Seeded)	7	0.0%	0.0%	14.3%		14.3%	57.1%	28.6%
Small Grain (Fall Seeded)	1	0.0%	0.0%	0.0%		0.0%	100.0%	0.0%
Soybeans (Full Season)	217	6.9%	0.0%	57.6%		64.5%	23.5%	12.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	12	0.0%	0.0%	0.0%		0.0%	50.0%	50.0%
Total Points	491	3.1%	0.6%	35.8%		39.5%	30.8%	29.7%

Perm. Pasture	36
Fallow	0
Forages	11
Conservation Reserve Program	60

2007 Hawk Creek-Yellow Medicine River Watershed Summary (25)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	787	8	0	154		162	252	373
Small Grain (Spring-Seeded)	38	1	0	11		12	18	8
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	460	19	0	299		318	105	37
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	77	1	0	23		24	26	27
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Total Points	1362	29	0	487		516	401	445

Perm. Pasture	36
Fallow	2
Forages	46
Conservation Reserve Program	83

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	787	1.0%	0.0%	19.6%		20.6%	32.0%	47.4%
Small Grain (Spring-Seeded)	38	2.6%	0.0%	28.9%		31.6%	47.4%	21.1%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	460	4.1%	0.0%	65.0%		69.1%	22.8%	8.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	77	1.3%	0.0%	29.9%		31.2%	33.8%	35.1%
Total Points	1362	2.1%	0.0%	35.8%		37.9%	29.4%	32.7%

Perm. Pasture	36
Fallow	2
Forages	46
Conservation Reserve Program	83

2007 Chippewa River Watershed Summary (26)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	660	6	0	99		105	199	356
Small Grain (Spring-Seeded)	54	1	0	8		9	6	39
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	496	33	2	238		273	149	74
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	2	0	0	0		0	0	2
Total Points	1212	40	2	345		387	354	471

Perm. Pasture	64
Fallow	2
Forages	51
Conservation Reserve Program	129

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	660	0.9%	0.0%	15.0%		15.9%	30.2%	53.9%
Small Grain (Spring-Seeded)	54	1.9%	0.0%	14.8%		16.7%	11.1%	72.2%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	496	6.7%	0.4%	48.0%		55.0%	30.0%	14.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	2	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Total Points	1212	3.3%	0.2%	28.5%		31.9%	29.2%	38.9%

Perm. Pasture	64
Fallow	2
Forages	51
Conservation Reserve Program	129

2007 Redwood River Watershed Summary (27)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	284	4	1	152	157	93	34
Small Grain (Spring-Seeded)	4	0	0	4	4	0	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	194	5	0	173	178	12	4
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum	0	0	0	0	0	0	0
Forage Crops	0	0	0	0	0	0	0
Other Crops	0	0	0	0	0	0	0
Total Points	482	9	1	329	339	105	38
Perm. Pasture	26						
Fallow	1						
Forages	12						
Conservation Reserve Program	30						

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	284	1.4%	0.4%	53.5%	55.3%	32.7%	12.0%
Small Grain (Spring-Seeded)	4	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	194	2.6%	0.0%	89.2%	91.8%	6.2%	2.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Points	482	1.9%	0.2%	68.3%	70.3%	21.8%	7.9%
Perm. Pasture	26						
Fallow	1						
Forages	12						
Conservation Reserve Program	30						

2007 Middle Minnesota River Watershed Summary (28)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till				
							Reduce-Till	Intensive-Till
Corn	592	1	0	100		101	303	188
Small Grain (Spring-Seeded)	14	0	0	3		3	7	4
Small Grain (Fall Seeded)	1	0	0	1		1	0	0
Soybeans (Full Season)	388	15	1	243		259	77	52
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	17	0	0	5		5	7	5
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Total Points	1012	16	1	352		369	394	249

Perm. Pasture	17
Fallow	3
Forages	26
Conservation Reserve Program	23

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till				
Corn	592	0.2%	0.0%	16.9%		17.1%	51.2%	31.8%
Small Grain (Spring-Seeded)	14	0.0%	0.0%	21.4%		21.4%	50.0%	28.6%
Small Grain (Fall Seeded)	1	0.0%	0.0%	100.0%		100.0%	0.0%	0.0%
Soybeans (Full Season)	388	3.9%	0.3%	62.6%		66.8%	19.8%	13.4%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	17	0.0%	0.0%	29.4%		29.4%	41.2%	29.4%
Total Points	1012	1.6%	0.1%	34.8%		36.5%	38.9%	24.6%

Perm. Pasture	17
Fallow	3
Forages	26
Conservation Reserve Program	23

2007 Cottonwood River Watershed Summary (29)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	514	4	0	207	211	178	125
Small Grain (Spring-Seeded)	7	0	0	2	2	0	5
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	401	9	3	335	347	35	19
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum	0	0	0	0	0	0	0
Forage Crops	0	0	0	0	0	0	0
Other Crops	2	0	0	1	1	0	1
Total Points	924	13	3	545	561	213	150

Perm. Pasture	26
Fallow	6
Forages	12
Conservation Reserve Program	38

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	514	0.8%	0.0%	40.3%	41.1%	34.6%	24.3%
Small Grain (Spring-Seeded)	7	0.0%	0.0%	28.6%	28.6%	0.0%	71.4%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	401	2.2%	0.7%	83.5%	86.5%	8.7%	4.7%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Crops	2	0.0%	0.0%	50.0%	50.0%	0.0%	50.0%
Total Points	924	1.4%	0.3%	59.0%	60.7%	23.1%	16.2%

Perm. Pasture	26
Fallow	6
Forages	12
Conservation Reserve Program	38

2007 Blue Earth River Watershed Summary (30)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	543	1	1	71	73	271	199
Small Grain (Spring-Seeded)	2	0	0	1	1	1	0
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	333	41	7	182	230	85	18
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum	0	0	0	0	0	0	0
Forage Crops	0	0	0	0	0	0	0
Other Crops	0	0	0	0	0	0	0
Total Points	878	42	8	254	304	357	217
Perm. Pasture	9						
Fallow	0						
Forages	8						
Conservation Reserve Program	17						

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	543	0.2%	0.2%	13.1%	13.4%	49.9%	36.6%
Small Grain (Spring-Seeded)	2	0.0%	0.0%	50.0%	50.0%	50.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	333	12.3%	2.1%	54.7%	69.1%	25.5%	5.4%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Points	878	4.8%	0.9%	28.9%	34.6%	40.7%	24.7%
Perm. Pasture	9						
Fallow	0						
Forages	8						
Conservation Reserve Program	17						

2007 Watonwan River Watershed Summary (31)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	536	2	12	80		94	236	206
Small Grain (Spring-Seeded)	2	0	0	2		2	0	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	359	19	8	240		267	68	24
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	3	0	0	1		1	2	0
Total Points	900	21	20	323		364	306	230

Perm. Pasture	6
Fallow	0
Forages	7
Conservation Reserve Program	20

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	536	0.4%	2.2%	14.9%		17.5%	44.0%	38.4%
Small Grain (Spring-Seeded)	2	0.0%	0.0%	100.0%		100.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	359	5.3%	2.2%	66.9%		74.4%	18.9%	6.7%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	3	0.0%	0.0%	33.3%		33.3%	66.7%	0.0%
Total Points	900	2.3%	2.2%	35.9%		40.4%	34.0%	25.6%

Perm. Pasture	6
Fallow	0
Forages	7
Conservation Reserve Program	20

2007 Le Sueur River Watershed Summary (32)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	805	8	0	90		98	418	289
Small Grain (Spring-Seeded)	5	0	0	1		1	1	3
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	520	69	1	272		342	146	32
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	5	0	0	1		1	1	3
Total Points	1335	77	1	364		442	566	327

Perm. Pasture	25
Fallow	0
Forages	37
Conservation Reserve Program	37

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	805	1.0%	0.0%	11.2%		12.2%	51.9%	35.9%
Small Grain (Spring-Seeded)	5	0.0%	0.0%	20.0%		20.0%	20.0%	60.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	520	13.3%	0.2%	52.3%		65.8%	28.1%	6.2%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	5	0.0%	0.0%	20.0%		20.0%	20.0%	60.0%
Total Points	1335	5.8%	0.1%	27.3%		33.1%	42.4%	24.5%

Perm. Pasture	25
Fallow	0
Forages	37
Conservation Reserve Program	37

2007 Lower Minnesota River Watershed Summary (33)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	900	5	0	197	202	341	357
Small Grain (Spring-Seeded)	15	0	0	2	2	3	10
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	641	16	0	359	375	111	155
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum	0	0	0	0	0	0	0
Forage Crops	0	0	0	0	0	0	0
Other Crops	29	0	0	7	7	13	9
Total Points	1585	21	0	565	586	468	531
Perm. Pasture	27						
Fallow	4						
Forages	144						
Conservation Reserve Program	47						

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	900	0.6%	0.0%	21.9%	22.4%	37.9%	39.7%
Small Grain (Spring-Seeded)	15	0.0%	0.0%	13.3%	13.3%	20.0%	66.7%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	641	2.5%	0.0%	56.0%	58.5%	17.3%	24.2%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Crops	29	0.0%	0.0%	24.1%	24.1%	44.8%	31.0%
Total Points	1585	1.3%	0.0%	35.6%	37.0%	29.5%	33.5%
Perm. Pasture	27						
Fallow	4						
Forages	144						
Conservation Reserve Program	47						

2007 Snake River Watershed Summary (36)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	5	0	0	1		1	0	4
Small Grain (Spring-Seeded)	0	0	0	0		0	0	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	6	3	0	1		4	0	2
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	11	3	0	2		5	0	6

Perm. Pasture	0
Fallow	0
Forages	5
Conservation Reserve Program	0

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	5	0.0%	0.0%	20.0%		20.0%	0.0%	80.0%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	6	50.0%	0.0%	16.7%		66.7%	0.0%	33.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	11	27.3%	0.0%	18.2%		45.5%	0.0%	54.5%

Perm. Pasture	0
Fallow	0
Forages	5
Conservation Reserve Program	0

2007 Lower St. Croix Watershed Summary (37)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	209	30	2	95		127	30	52
Small Grain (Spring-Seeded)	10	6	0	4		10	0	0
Small Grain (Fall Seeded)	2	1	0	0		1	0	1
Soybeans (Full Season)	278	58	0	63		121	71	86
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	499	95	2	162		259	101	139

Perm. Pasture	4
Fallow	0
Forages	11
Conservation Reserve Program	1

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	209	14.4%	1.0%	45.5%		60.8%	14.4%	24.9%
Small Grain (Spring-Seeded)	10	60.0%	0.0%	40.0%		100.0%	0.0%	0.0%
Small Grain (Fall Seeded)	2	50.0%	0.0%	0.0%		50.0%	0.0%	50.0%
Soybeans (Full Season)	278	20.9%	0.0%	22.7%		43.5%	25.5%	30.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	499	19.0%	0.4%	32.5%		51.9%	20.2%	27.9%

Perm. Pasture	4
Fallow	0
Forages	11
Conservation Reserve Program	1

2007 Rush-Vermillion Watershed Summary (38)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	187	9	0	51		60	71	56
Small Grain (Spring-Seeded)	7	0	0	1		1	4	2
Small Grain (Fall Seeded)	0	0	0	0		0		
Soybeans (Full Season)	92	18	0	47		65	20	7
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	11	0	0	0		0	9	2
Total Points	297	27	0	99		126	104	67

Perm. Pasture	18
Fallow	27
Forages	44
Conservation Reserve Program	7

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	187	4.8%	0.0%	27.3%		32.1%	38.0%	29.9%
Small Grain (Spring-Seeded)	7	0.0%	0.0%	14.3%		14.3%	57.1%	28.6%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	92	19.6%	0.0%	51.1%		70.7%	21.7%	7.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	11	0.0%	0.0%	0.0%		0.0%	81.8%	18.2%
Total Points	297	9.1%	0.0%	33.3%		42.4%	35.0%	22.6%

Perm. Pasture	18
Fallow	27
Forages	44
Conservation Reserve Program	7

2007 Cannon River Watershed Summary (39)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	771	31	1	156		188	334	249
Small Grain (Spring-Seeded)	10	0	0	0		0	7	3
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	480	67	3	236		306	117	57
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	14	0	0	1		1	5	8
Total Points	1275	98	4	393		495	463	317

Perm. Pasture 101

Fallow 21

Forages 143

Conservation Reserve Program 121

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	771	4.0%	0.1%	20.2%		24.4%	43.3%	32.3%
Small Grain (Spring-Seeded)	10	0.0%	0.0%	0.0%		0.0%	70.0%	30.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	480	14.0%	0.6%	49.2%		63.8%	24.4%	11.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	14	0.0%	0.0%	7.1%		7.1%	35.7%	57.1%
Total Points	1275	7.7%	0.3%	30.8%		38.8%	36.3%	24.9%

Perm. Pasture 101

Fallow 21

Forages 143

Conservation Reserve Program 121

2007 Buffalo-Whitewater Watershed Summary (40)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	246	34	0	68		102	64	80
Small Grain (Spring-Seeded)	15	1	0	7		8	5	2
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	82	22	1	34		57	13	12
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	3	0	0	0		0	1	2
Total Points	346	57	1	109		167	83	96

Perm. Pasture	28
Fallow	0
Forages	89
Conservation Reserve Program	7

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	246	13.8%	0.0%	27.6%		41.5%	26.0%	32.5%
Small Grain (Spring-Seeded)	15	6.7%	0.0%	46.7%		53.3%	33.3%	13.3%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	82	26.8%	1.2%	41.5%		69.5%	15.9%	14.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	3	0.0%	0.0%	0.0%		0.0%	33.3%	66.7%
Total Points	346	16.5%	0.3%	31.5%		48.3%	24.0%	27.7%

Perm. Pasture	28
Fallow	0
Forages	89
Conservation Reserve Program	7

2007 Zumbro River Watershed Summary (41)

Annual Crop	Total Points	Conservation Tillage			Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)				(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till		Reduce-Till	Intensive-Till
Corn	834	50	10	152	212	269	353
Small Grain (Spring-Seeded)	6	0	0	3	3	1	2
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	418	102	8	164	274	107	37
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum	0	0	0	0	0	0	0
Forage Crops	0	0	0	0	0	0	0
Other Crops	14	0	0	7	7	0	7
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Total Points	1272	152	18	326	496	377	399

Perm. Pasture	90
Fallow	7
Forages	84
Conservation Reserve Program	23

Annual Crop	Total Points	Conservation Tillage			Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)				(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till		Reduce-Till	Intensive-Till
Corn	834	6.0%	1.2%	18.2%	25.4%	32.3%	42.3%
Small Grain (Spring-Seeded)	6	0.0%	0.0%	50.0%	50.0%	16.7%	33.3%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	418	24.4%	1.9%	39.2%	65.6%	25.6%	8.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Crops	14	0.0%	0.0%	50.0%	50.0%	0.0%	50.0%
Total Points	1272	11.9%	1.4%	25.6%	39.0%	29.6%	31.4%

Perm. Pasture	90
Fallow	7
Forages	84
Conservation Reserve Program	23

2007 LaCrosse-Pine Watershed Summary (42)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	16	2	0	10		12	1	3
Small Grain (Spring-Seeded)	2	0	0	1		1	0	1
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	3	1	0	1		2	0	1
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	21	3	0	12		15	1	5

Perm. Pasture	2
Fallow	0
Forages	20
Conservation Reserve Program	2

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	16	12.5%	0.0%	62.5%		75.0%	6.3%	18.8%
Small Grain (Spring-Seeded)	2	0.0%	0.0%	50.0%		50.0%	0.0%	50.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	3	33.3%	0.0%	33.3%		66.7%	0.0%	33.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	21	14.3%	0.0%	57.1%		71.4%	4.8%	23.8%

Perm. Pasture	2
Fallow	0
Forages	20
Conservation Reserve Program	2

2007 Root River Watershed Summary (43)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	765	93	1	214		308	241	216
Small Grain (Spring-Seeded)	36	4	0	10		14	10	12
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	281	118	2	87		207	50	24
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	4	0	0	2		2	0	2
Total Points	1086	215	3	313		531	301	254

Perm. Pasture	119
Fallow	4
Forages	190
Conservation Reserve Program	64

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	765	12.2%	0.1%	28.0%		40.3%	31.5%	28.2%
Small Grain (Spring-Seeded)	36	11.1%	0.0%	27.8%		38.9%	27.8%	33.3%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	281	42.0%	0.7%	31.0%		73.7%	17.8%	8.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	4	0.0%	0.0%	50.0%		50.0%	0.0%	50.0%
Total Points	1086	19.8%	0.3%	28.8%		48.9%	27.7%	23.4%

Perm. Pasture	119
Fallow	4
Forages	190
Conservation Reserve Program	64

2007 Coon-Yellow Watershed Summary (44)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue)	(0-15% residue)
							Reduce-Till	Intensive-Till
Corn	141	51	0	46		97	17	27
Small Grain (Spring-Seeded)	9	2	0	4		6	3	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	13	8	0	3		11	0	2
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	163	61	0	53		114	20	29

Perm. Pasture	21
Fallow	0
Forages	49
Conservation Reserve Program	12

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	141	36.2%	0.0%	32.6%		68.8%	12.1%	19.1%
Small Grain (Spring-Seeded)	9	22.2%	0.0%	44.4%		66.7%	33.3%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	13	61.5%	0.0%	23.1%		84.6%	0.0%	15.4%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	163	37.4%	0.0%	32.5%		69.9%	12.3%	17.8%

Perm. Pasture	21
Fallow	0
Forages	49
Conservation Reserve Program	12

2007 Upper Iowa River Watershed Summary (46)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	110	14	0	36		50	51	9
Small Grain (Spring-Seeded)	4	0	0	0		0	4	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	37	10	0	19		29	7	1
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	151	24	0	55		79	62	10

Perm. Pasture	8
Fallow	0
Forages	12
Conservation Reserve Program	10

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till				
Corn	110	12.7%	0.0%	32.7%		45.5%	46.4%	8.2%
Small Grain (Spring-Seeded)	4	0.0%	0.0%	0.0%		0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	37	27.0%	0.0%	51.4%		78.4%	18.9%	2.7%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	151	15.9%	0.0%	36.4%		52.3%	41.1%	6.6%

Perm. Pasture	8
Fallow	0
Forages	12
Conservation Reserve Program	10

2007 Upper Wapsipinicon River Watershed Summary (47)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue)	(0-15% residue)
							Reduce-Till	Intensive-Till
Corn	10	0	0	7		7	3	0
Small Grain (Spring-Seeded)	0	0	0	0		0	0	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	8	0	0	5		5	3	0
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	18	0	0	12		12	6	0

Perm. Pasture	0
Fallow	0
Forages	1
Conservation Reserve Program	0

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	10	0.0%	0.0%	70.0%		70.0%	30.0%	0.0%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	8	0.0%	0.0%	62.5%		62.5%	37.5%	0.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	18	0.0%	0.0%	66.7%		66.7%	33.3%	0.0%

Perm. Pasture	0
Fallow	0
Forages	1
Conservation Reserve Program	0

2007 Upper Cedar River Watershed Summary (48)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	317	12	0	61		73	119	125
Small Grain (Spring-Seeded)	2	0	0	0		0	0	2
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	177	26	1	86		113	48	16
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	15	0	0	1		1	1	13
<hr/>								
Total Points	511	38	1	148		187	168	156
<hr/>								
Perm. Pasture	7							
Fallow	0							
Forages	18							
Conservation Reserve Program	12							

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	317	3.8%	0.0%	19.2%		23.0%	37.5%	39.4%
Small Grain (Spring-Seeded)	2	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	177	14.7%	0.6%	48.6%		63.8%	27.1%	9.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	15	0.0%	0.0%	6.7%		6.7%	6.7%	86.7%
Total Points	511	7.4%	0.2%	29.0%		36.6%	32.9%	30.5%
Perm. Pasture	7							
Fallow	0							
Forages	18							
Conservation Reserve Program	12							

2007 Shell Rock River Watershed Summary (49)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	104	4	0	7		11	42	51
Small Grain (Spring-Seeded)	0	0	0	0		0	0	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	70	27	0	17		44	21	5
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	1	0	0	0		0	1	0
Total Points	175	31	0	24		55	64	56

Perm. Pasture	2
Fallow	0
Forages	8
Conservation Reserve Program	9

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	104	3.8%	0.0%	6.7%		10.6%	40.4%	49.0%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	70	38.6%	0.0%	24.3%		62.9%	30.0%	7.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	1	0.0%	0.0%	0.0%		0.0%	100.0%	0.0%
Total Points	175	17.7%	0.0%	13.7%		31.4%	36.6%	32.0%

Perm. Pasture	2
Fallow	0
Forages	8
Conservation Reserve Program	9

2007 Winnebago River Watershed Summary (50)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	32	2	0	1		3	13	16
Small Grain (Spring-Seeded)	1	0	0	0		0	1	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	28	4	0	10		14	11	3
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	61	6	0	11		17	25	19

Perm. Pasture	2
Fallow	0
Forages	1
Conservation Reserve Program	0

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till				
Corn	32	6.3%	0.0%	3.1%		9.4%	40.6%	50.0%
Small Grain (Spring-Seeded)	1	0.0%	0.0%	0.0%		0.0%	100.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	28	14.3%	0.0%	35.7%		50.0%	39.3%	10.7%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	61	9.8%	0.0%	18.0%		27.9%	41.0%	31.1%

Perm. Pasture	2
Fallow	0
Forages	1
Conservation Reserve Program	0

2007 Des Moines Headwaters Watershed Summary (51)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	501	11	1	149		161	239	101
Small Grain (Spring-Seeded)	4	0	0	3		3	1	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	379	15	2	282		299	65	15
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	884	26	3	434		463	305	116

Perm. Pasture	29
Fallow	0
Forages	17
Conservation Reserve Program	50

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	501	2.2%	0.2%	29.7%		32.1%	47.7%	20.2%
Small Grain (Spring-Seeded)	4	0.0%	0.0%	75.0%		75.0%	25.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	379	4.0%	0.5%	74.4%		78.9%	17.2%	4.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	884	2.9%	0.3%	49.1%		52.4%	34.5%	13.1%

Perm. Pasture	29
Fallow	0
Forages	17
Conservation Reserve Program	50

2007 Upper Des Moines Watershed Summary (52)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	29	1	0	10		11	16	2
Small Grain (Spring-Seeded)	0	0	0	0		0	0	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	29	4	1	24		29	0	0
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	1	0	0	0		0	0	1
<hr/>								
Total Points	59	5	1	34		40	16	3

Perm. Pasture	1
Fallow	0
Forages	0
Conservation Reserve Program	1

Annual Crop	Total Points	Conservation Tillage			= Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)				(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till		Reduce-Till	Intensive-Till
Corn	29	3.4%	0.0%	34.5%	37.9%	55.2%	6.9%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	29	13.8%	3.4%	82.8%	100.0%	0.0%	0.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Crops	1	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Points	59	8.5%	1.7%	57.6%	67.8%	27.1%	5.1%

Perm. Pasture	1
Fallow	0
Forages	0
Conservation Reserve Program	1

2007 East Fork Des Moines Watershed Summary (53)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till				
Corn	77	2	0	17		19	52	6
Small Grain (Spring-Seeded)	0	0	0	0		0	0	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	62	3	5	35		43	18	1
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	139	5	5	52		62	70	7

Perm. Pasture	1
Fallow	0
Forages	0
Conservation Reserve Program	0

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	77	2.6%	0.0%	22.1%		24.7%	67.5%	7.8%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	62	4.8%	8.1%	56.5%		69.4%	29.0%	1.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	139	3.6%	3.6%	37.4%		44.6%	50.4%	5.0%

Perm. Pasture	1
Fallow	0
Forages	0
Conservation Reserve Program	0

2007 Bois de Sioux Watershed Summary (54)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue)	(0-15% residue)
							Reduce-Till	Intensive-Till
Corn	126	1	0	57	58	24	44	
Small Grain (Spring-Seeded)	76	0	0	8	8	9	59	
Small Grain (Fall Seeded)	0	0	0	0	0	0	0	
Soybeans (Full Season)	101	0	0	48	48	9	44	
Soybeans (Double-Cropped)	0	0	0	0	0	0	0	
Cotton	0	0	0	0	0	0	0	
Grain Sorghum	0	0	0	0	0	0	0	
Forage Crops	0	0	0	0	0	0	0	
Other Crops	48	0	0	9	9	7	32	
Total Points	351	1	0	122	123	49	179	

Perm. Pasture	1
Fallow	0
Forages	1
Conservation Reserve Program	22

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	126	0.8%	0.0%	45.2%		46.0%	19.0%	34.9%
Small Grain (Spring-Seeded)	76	0.0%	0.0%	10.5%		10.5%	11.8%	77.6%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	101	0.0%	0.0%	47.5%		47.5%	8.9%	43.6%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	48	0.0%	0.0%	18.8%		18.8%	14.6%	66.7%
Total Points	351	0.3%	0.0%	34.8%		35.0%	14.0%	51.0%

Perm. Pasture	1
Fallow	0
Forages	1
Conservation Reserve Program	22

2007 Mustinka River Watershed Summary (55)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	362	1	0	134		135	91	136
Small Grain (Spring-Seeded)	47	0	0	4		4	2	41
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	262	11	1	163		175	40	47
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	9	0	0	6		6	1	2
Total Points	680	12	1	307		320	134	226

Perm. Pasture	9
Fallow	1
Forages	12
Conservation Reserve Program	71

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	362	0.3%	0.0%	37.0%		37.3%	25.1%	37.6%
Small Grain (Spring-Seeded)	47	0.0%	0.0%	8.5%		8.5%	4.3%	87.2%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	262	4.2%	0.4%	62.2%		66.8%	15.3%	17.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	9	0.0%	0.0%	66.7%		66.7%	11.1%	22.2%
Total Points	680	1.8%	0.1%	45.1%		47.1%	19.7%	33.2%

Perm. Pasture	9
Fallow	1
Forages	12
Conservation Reserve Program	71

2007 Ottertail River Watershed Summary (56)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	152	3	0	16		19	46	87
Small Grain (Spring-Seeded)	78	0	0	3		3	26	49
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	127	6	0	28		34	46	47
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	36	0	0	3		3	4	29
Total Points	393	9	0	50		59	122	212

Perm. Pasture	44
Fallow	5
Forages	70
Conservation Reserve Program	60

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	152	2.0%	0.0%	10.5%		12.5%	30.3%	57.2%
Small Grain (Spring-Seeded)	78	0.0%	0.0%	3.8%		3.8%	33.3%	62.8%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	127	4.7%	0.0%	22.0%		26.8%	36.2%	37.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	36	0.0%	0.0%	8.3%		8.3%	11.1%	80.6%
Total Points	393	2.3%	0.0%	12.7%		15.0%	31.0%	53.9%

Perm. Pasture	44
Fallow	5
Forages	70
Conservation Reserve Program	60

2007 Upper Red River Watershed Summary (57)

Annual Crop	Total Points	Conservation Tillage			= Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)				(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till		Reduce-Till	Intensive-Till
Corn	30	0	0	1	1	6	23
Small Grain (Spring-Seeded)	77	0	0	0	0	18	59
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	76	0	0	8	8	22	46
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum	0	0	0	0	0	0	0
Forage Crops	0	0	0	0	0	0	0
Other Crops	17	0	0	1	1	7	9
Total Points	200	0	0	10	10	53	137

Perm. Pasture	0
Fallow	0
Forages	0
Conservation Reserve Program	0

Annual Crop	Total Points	Conservation Tillage			= Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)				(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till		Reduce-Till	Intensive-Till
Corn	30	0.0%	0.0%	3.3%	3.3%	20.0%	76.7%
Small Grain (Spring-Seeded)	77	0.0%	0.0%	0.0%	0.0%	23.4%	76.6%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	76	0.0%	0.0%	10.5%	10.5%	28.9%	60.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Crops	17	0.0%	0.0%	5.9%	5.9%	41.2%	52.9%
Total Points	200	0.0%	0.0%	5.0%	5.0%	26.5%	68.5%

Perm. Pasture	0
Fallow	0
Forages	0
Conservation Reserve Program	0

2007 Buffalo River Watershed Summary (58)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	105	1	0	5	6	36	63
Small Grain (Spring-Seeded)	135	0	0	2	2	35	98
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	152	8	0	16	24	49	79
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum	0	0	0	0	0	0	0
Forage Crops	0	0	0	0	0	0	0
Other Crops	44	0	0	6	6	23	15
Total Points	436	9	0	29	38	143	255

Perm. Pasture	12
Fallow	3
Forages	27
Conservation Reserve Program	45

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	105	1.0%	0.0%	4.8%	5.7%	34.3%	60.0%
Small Grain (Spring-Seeded)	135	0.0%	0.0%	1.5%	1.5%	25.9%	72.6%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	152	5.3%	0.0%	10.5%	15.8%	32.2%	52.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Crops	44	0.0%	0.0%	13.6%	13.6%	52.3%	34.1%
Total Points	436	2.1%	0.0%	6.7%	8.7%	32.8%	58.5%

Perm. Pasture	12
Fallow	3
Forages	27
Conservation Reserve Program	45

2007 Elm Marsh Watershed Summary (59)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue)	(0-15% residue)
							Reduce-Till	Intensive-Till
Corn	27	0	0	2		2	10	15
Small Grain (Spring-Seeded)	52	0	0	0		0	15	37
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	61	0	0	8		8	34	19
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	17	0	0	3		3	5	9
Total Points	157	0	0	13		13	64	80

Perm. Pasture	3
Fallow	1
Forages	1
Conservation Reserve Program	9

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	27	0.0%	0.0%	7.4%		7.4%	37.0%	55.6%
Small Grain (Spring-Seeded)	52	0.0%	0.0%	0.0%		0.0%	28.8%	71.2%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	61	0.0%	0.0%	13.1%		13.1%	55.7%	31.1%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	17	0.0%	0.0%	17.6%		17.6%	29.4%	52.9%
Total Points	157	0.0%	0.0%	8.3%		8.3%	40.8%	51.0%

Perm. Pasture	3
Fallow	1
Forages	1
Conservation Reserve Program	9

2007 Eastern Wild Rice Watershed Summary (60)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	188	0	1	6		7	42	139
Small Grain (Spring-Seeded)	169	0	0	1		1	41	127
Small Grain (Fall Seeded)	3	0	0	0		0	1	2
Soybeans (Full Season)	319	22	1	38		61	90	168
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	46	2	0	3		5	22	19
Total Points	725	24	2	48		74	196	455

Perm. Pasture	33
Fallow	1
Forages	20
Conservation Reserve Program	97

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	188	0.0%	0.5%	3.2%		3.7%	22.3%	73.9%
Small Grain (Spring-Seeded)	169	0.0%	0.0%	0.6%		0.6%	24.3%	75.1%
Small Grain (Fall Seeded)	3	0.0%	0.0%	0.0%		0.0%	33.3%	66.7%
Soybeans (Full Season)	319	6.9%	0.3%	11.9%		19.1%	28.2%	52.7%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	46	4.3%	0.0%	6.5%		10.9%	47.8%	41.3%
Total Points	725	3.3%	0.3%	6.6%		10.2%	27.0%	62.8%

Perm. Pasture	33
Fallow	1
Forages	20
Conservation Reserve Program	97

2007 Sandhill Wilson Watershed Summary (61)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	29	0	0	3		3	12	14
Small Grain (Spring-Seeded)	99	0	0	22		22	53	24
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	77	1	0	39		40	23	14
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	33	0	0	15		15	12	6
Total Points	238	1	0	79		80	100	58

Perm. Pasture	11
Fallow	0
Forages	5
Conservation Reserve Program	37

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	29	0.0%	0.0%	10.3%		10.3%	41.4%	48.3%
Small Grain (Spring-Seeded)	99	0.0%	0.0%	22.2%		22.2%	53.5%	24.2%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	77	1.3%	0.0%	50.6%		51.9%	29.9%	18.2%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	33	0.0%	0.0%	45.5%		45.5%	36.4%	18.2%
Total Points	238	0.4%	0.0%	33.2%		33.6%	42.0%	24.4%

Perm. Pasture	11
Fallow	0
Forages	5
Conservation Reserve Program	37

2007 Red Lake River Watershed Summary (63)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	24	0	0	6		6	10	8
Small Grain (Spring-Seeded)	258	0	0	19		19	73	166
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	215	8	0	58		66	69	80
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	48	0	0	12		12	18	18
Total Points	545	8	0	95		103	170	272

Perm. Pasture	13
Fallow	11
Forages	45
Conservation Reserve Program	160

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	24	0.0%	0.0%	25.0%		25.0%	41.7%	33.3%
Small Grain (Spring-Seeded)	258	0.0%	0.0%	7.4%		7.4%	28.3%	64.3%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	215	3.7%	0.0%	27.0%		30.7%	32.1%	37.2%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	48	0.0%	0.0%	25.0%		25.0%	37.5%	37.5%
Total Points	545	1.5%	0.0%	17.4%		18.9%	31.2%	49.9%

Perm. Pasture	13
Fallow	11
Forages	45
Conservation Reserve Program	160

2007 Thief River Watershed Summary (65)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	15	0	0	1		1	3	11
Small Grain (Spring-Seeded)	168	2	0	7		9	24	135
Small Grain (Fall Seeded)	1	0	0	0		0	0	1
Soybeans (Full Season)	188	1	0	48		49	54	85
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	17	0	0	2		2	4	11
Total Points	389	3	0	58		61	85	243

Perm. Pasture	1
Fallow	2
Forages	2
Conservation Reserve Program	102

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	15	0.0%	0.0%	6.7%		6.7%	20.0%	73.3%
Small Grain (Spring-Seeded)	168	1.2%	0.0%	4.2%		5.4%	14.3%	80.4%
Small Grain (Fall Seeded)	1	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Soybeans (Full Season)	188	0.5%	0.0%	25.5%		26.1%	28.7%	45.2%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	17	0.0%	0.0%	11.8%		11.8%	23.5%	64.7%
Total Points	389	0.8%	0.0%	14.9%		15.7%	21.9%	62.5%

Perm. Pasture	1
Fallow	2
Forages	2
Conservation Reserve Program	102

2007 Clearwater River Watershed Summary (66)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	29	1	0	6		7	20	2
Small Grain (Spring-Seeded)	145	0	0	17		17	105	23
Small Grain (Fall Seeded)	1	0	0	0		0	0	1
Soybeans (Full Season)	150	2	0	67		69	65	16
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	20	1	0	5		6	8	6
Total Points	345	4	0	95		99	198	48

Perm. Pasture	32
Fallow	4
Forages	15
Conservation Reserve Program	200

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	29	3.4%	0.0%	20.7%		24.1%	69.0%	6.9%
Small Grain (Spring-Seeded)	145	0.0%	0.0%	11.7%		11.7%	72.4%	15.9%
Small Grain (Fall Seeded)	1	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Soybeans (Full Season)	150	1.3%	0.0%	44.7%		46.0%	43.3%	10.7%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	20	5.0%	0.0%	25.0%		30.0%	40.0%	30.0%
Total Points	345	1.2%	0.0%	27.5%		28.7%	57.4%	13.9%

Perm. Pasture	32
Fallow	4
Forages	15
Conservation Reserve Program	200

2007 Grand Marais Red Watershed Summary (67)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	11	0	0	3		3	5	3
Small Grain (Spring-Seeded)	107	0	0	14		14	52	41
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	47	0	0	13		13	19	15
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	77	0	0	22		22	42	13
Total Points	242	0	0	52		52	118	72

Perm. Pasture 0

Fallow 0

Forages 2

Conservation Reserve Program 22

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	11	0.0%	0.0%	27.3%		27.3%	45.5%	27.3%
Small Grain (Spring-Seeded)	107	0.0%	0.0%	13.1%		13.1%	48.6%	38.3%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	47	0.0%	0.0%	27.7%		27.7%	40.4%	31.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	77	0.0%	0.0%	28.6%		28.6%	54.5%	16.9%
Total Points	242	0.0%	0.0%	21.5%		21.5%	48.8%	29.8%

Perm. Pasture 0

Fallow 0

Forages 2

Conservation Reserve Program 22

2007 Snake River Watershed Summary (68)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	14	0	0	1		1	7	6
Small Grain (Spring-Seeded)	122	0	0	5		5	36	81
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	74	1	0	16		17	39	18
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	32	0	0	13		13	13	6
Total Points	242	1	0	35		36	95	111

Perm. Pasture	5
Fallow	2
Forages	11
Conservation Reserve Program	67

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	14	0.0%	0.0%	7.1%		7.1%	50.0%	42.9%
Small Grain (Spring-Seeded)	122	0.0%	0.0%	4.1%		4.1%	29.5%	66.4%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	74	1.4%	0.0%	21.6%		23.0%	52.7%	24.3%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	32	0.0%	0.0%	40.6%		40.6%	40.6%	18.8%
Total Points	242	0.4%	0.0%	14.5%		14.9%	39.3%	45.9%

Perm. Pasture	5
Fallow	2
Forages	11
Conservation Reserve Program	67

2007 Lower Red Watershed Summary (69)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	4	0	0	1		1	0	3
Small Grain (Spring-Seeded)	169	4	0	4		8	74	87
Small Grain (Fall Seeded)	2	1	0	0		1	1	0
Soybeans (Full Season)	103	1	0	7		8	56	39
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	60	0	0	9		9	33	18
Total Points	338	6	0	21		27	164	147

Perm. Pasture	11
Fallow	1
Forages	7
Conservation Reserve Program	74

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	4	0.0%	0.0%	25.0%		25.0%	0.0%	75.0%
Small Grain (Spring-Seeded)	169	2.4%	0.0%	2.4%		4.7%	43.8%	51.5%
Small Grain (Fall Seeded)	2	50.0%	0.0%	0.0%		50.0%	50.0%	0.0%
Soybeans (Full Season)	103	1.0%	0.0%	6.8%		7.8%	54.4%	37.9%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	60	0.0%	0.0%	15.0%		15.0%	55.0%	30.0%
Total Points	338	1.8%	0.0%	6.2%		8.0%	48.5%	43.5%

Perm. Pasture	11
Fallow	1
Forages	7
Conservation Reserve Program	74

2007 Two Rivers Watershed Summary (70)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	8	0	0	0		0	4	4
Small Grain (Spring-Seeded)	106	1	0	4		5	24	77
Small Grain (Fall Seeded)	4	2	0	1		3	0	1
Soybeans (Full Season)	55	0	0	1		1	11	43
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	22	0	0	0		0	8	14
<hr/>								
Total Points	195	3	0	6		9	47	139

Perm. Pasture	51
Fallow	4
Forages	19
Conservation Reserve Program	84

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	8	0.0%	0.0%	0.0%		0.0%	50.0%	50.0%
Small Grain (Spring-Seeded)	106	0.9%	0.0%	3.8%		4.7%	22.6%	72.6%
Small Grain (Fall Seeded)	4	50.0%	0.0%	25.0%		75.0%	0.0%	25.0%
Soybeans (Full Season)	55	0.0%	0.0%	1.8%		1.8%	20.0%	78.2%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	22	0.0%	0.0%	0.0%		0.0%	36.4%	63.6%
Total Points	195	1.5%	0.0%	3.1%		4.6%	24.1%	71.3%

Perm. Pasture	51
Fallow	4
Forages	19
Conservation Reserve Program	84

2007 Roseau River Watershed Summary (71)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	1	0	0	0		0	0	1
Small Grain (Spring-Seeded)	39	1	0	0		1	0	38
Small Grain (Fall Seeded)	6	1	0	0		1	0	5
Soybeans (Full Season)	21	1	0	1		2	2	17
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	9	0	0	0		0	0	9
Total Points	76	3	0	1		4	2	70

Perm. Pasture	14
Fallow	2
Forages	44
Conservation Reserve Program	84

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	1	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Small Grain (Spring-Seeded)	39	2.6%	0.0%	0.0%		2.6%	0.0%	97.4%
Small Grain (Fall Seeded)	6	16.7%	0.0%	0.0%		16.7%	0.0%	83.3%
Soybeans (Full Season)	21	4.8%	0.0%	4.8%		9.5%	9.5%	81.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	9	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Total Points	76	3.9%	0.0%	1.3%		5.3%	2.6%	92.1%

Perm. Pasture	14
Fallow	2
Forages	44
Conservation Reserve Program	84

2007 Lake of the Woods Watershed Summary (80)

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	1	0	0	0		0	0	1
Small Grain (Spring-Seeded)	4	0	0	0		0	0	4
Small Grain (Fall Seeded)	1	0	0	0		0	0	1
Soybeans (Full Season)	8	0	0	0		0	0	8
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	4	0	0	0		0	0	4
<hr/>								
Total Points	18	0	0	0		0	0	18

Perm. Pasture	8
Fallow	0
Forages	3
Conservation Reserve Program	4

Annual Crop	Total Points	Conservation Tillage			=	Total Conservation Tillage	Other Tillage Practices	
		(greater than 30% residue)					(15-30% residue)	(0-15% residue)
		No-Till	Ridge-Till	Mulch-Till			Reduce-Till	Intensive-Till
Corn	1	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Small Grain (Spring-Seeded)	4	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Small Grain (Fall Seeded)	1	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Soybeans (Full Season)	8	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	4	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%
Total Points	18	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%

Perm. Pasture	8
Fallow	0
Forages	3
Conservation Reserve Program	4

2007 Upper Big Sioux Watershed Summary (81)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	14	0	0	6		6	4	4
Small Grain (Spring-Seeded)	1	0	0	1		1	0	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	5	1	0	4		5	0	0
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	20	1	0	11		12	4	4

Perm. Pasture	7
Fallow	0
Forages	0
Conservation Reserve Program	0

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	14	0.0%	0.0%	42.9%		42.9%	28.6%	28.6%
Small Grain (Spring-Seeded)	1	0.0%	0.0%	100.0%		100.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	5	20.0%	0.0%	80.0%		100.0%	0.0%	0.0%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	20	5.0%	0.0%	55.0%		60.0%	20.0%	20.0%

Perm. Pasture	7
Fallow	0
Forages	0
Conservation Reserve Program	0

2007 Lower Big Sioux Watershed Summary (82)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	336	1	1	44		46	162	128
Small Grain (Spring-Seeded)	8	0	0	2		2	6	0
Small Grain (Fall Seeded)	1	0	0	1		1	0	0
Soybeans (Full Season)	265	18	4	155		177	68	20
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	610	19	5	202		226	236	148

Perm. Pasture	37
Fallow	0
Forages	23
Conservation Reserve Program	28

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	336	0.3%	0.3%	13.1%		13.7%	48.2%	38.1%
Small Grain (Spring-Seeded)	8	0.0%	0.0%	25.0%		25.0%	75.0%	0.0%
Small Grain (Fall Seeded)	1	0.0%	0.0%	100.0%		100.0%	0.0%	0.0%
Soybeans (Full Season)	265	6.8%	1.5%	58.5%		66.8%	25.7%	7.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	610	3.1%	0.8%	33.1%		37.0%	38.7%	24.3%

Perm. Pasture	37
Fallow	0
Forages	23
Conservation Reserve Program	28

2007 Rock River Watershed Summary (83)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	430	0	3	115	118	203	109
Small Grain (Spring-Seeded)	10	0	0	3	3	4	3
Small Grain (Fall Seeded)	0	0	0	0	0	0	0
Soybeans (Full Season)	291	15	0	173	188	93	10
Soybeans (Double-Cropped)	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Grain Sorghum	0	0	0	0	0	0	0
Forage Crops	0	0	0	0	0	0	0
Other Crops	0	0	0	0	0	0	0
Total Points	731	15	3	291	309	300	122

Perm. Pasture	42
Fallow	0
Forages	22
Conservation Reserve Program	16

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till		(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	430	0.0%	0.7%	26.7%	27.4%	47.2%	25.3%
Small Grain (Spring-Seeded)	10	0.0%	0.0%	30.0%	30.0%	40.0%	30.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Soybeans (Full Season)	291	5.2%	0.0%	59.5%	64.6%	32.0%	3.4%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Points	731	2.1%	0.4%	39.8%	42.3%	41.0%	16.7%

Perm. Pasture	42
Fallow	0
Forages	22
Conservation Reserve Program	16

2007 Little Sioux River Watershed Summary (84)

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	117	4	2	36		42	65	10
Small Grain (Spring-Seeded)	0	0	0	0		0	0	0
Small Grain (Fall Seeded)	0	0	0	0		0	0	0
Soybeans (Full Season)	79	6	1	58		65	12	2
Soybeans (Double-Cropped)	0	0	0	0		0	0	0
Cotton	0	0	0	0		0	0	0
Grain Sorghum	0	0	0	0		0	0	0
Forage Crops	0	0	0	0		0	0	0
Other Crops	0	0	0	0		0	0	0
Total Points	196	10	3	94		107	77	12
Perm. Pasture	4							
Fallow	0							
Forages	4							
Conservation Reserve Program	2							

Annual Crop	Total Points	Conservation Tillage (greater than 30% residue)			=	Total Conservation Tillage	Other Tillage Practices	
		No-Till	Ridge-Till	Mulch-Till			(15-30% residue) Reduce-Till	(0-15% residue) Intensive-Till
Corn	117	3.4%	1.7%	30.8%		35.9%	55.6%	8.5%
Small Grain (Spring-Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Small Grain (Fall Seeded)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Soybeans (Full Season)	79	7.6%	1.3%	73.4%		82.3%	15.2%	2.5%
Soybeans (Double-Cropped)	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Cotton	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Grain Sorghum	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Forage Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Other Crops	0	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Total Points	196	5.1%	1.5%	48.0%		54.6%	39.3%	6.1%
Perm. Pasture	4							
Fallow	0							
Forages	4							
Conservation Reserve Program	2							