Farmland Ownership and Tenure in Iowa 1982-2002: A Twenty-Year Perspective

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PM XXXX July 2004

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File: Economics 1-8

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Stanley R. Johnson, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

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Executive Summary

"Farmland Ownership and Tenure in Iowa 1982-2002: A Twenty-Year Perspective" carries out the mandate of the Iowa Legislature. This study focuses on forms of ownership and tenancy of farmland ownership in Iowa in 2002. The purpose of the study is to identify new directions and compare old trends using the 1982 and 1992 data. Identification of trends and comparisons of farmland ownership and tenure are analyzed for the following areas:

- agricultural landholdings by type of ownership;
- demographics of owners;
- how land is acquired, held, transferred, and managed;
- tenancy of land and identifiable characteristics in the tenancy relationship;
- demographics of landlords and lengths of tenancy; and
- the impact of conservation programs and other practices which sometimes assign limited interests in land to governmental or private organizations with an objective of influencing land use patterns.

Farmland ownership and tenure are analyzed for all types of farmland owners in a general sample. Major conclusions from this study on ownership and tenure in Iowa are:

- ownership structure has shifted from sole ownership toward tenants in common and trusts between 1982 and 2002;
- in 2002, only 41 percent of Iowa farmland was farmed by the owner and between 1982 and 2002, a 20-year period, there was a 30 percent decrease in owner-operated farmland;
- more than 48 percent of Iowa farmland was owned by persons 65 years and older in 2002 compared with 42 percent in the 65 years and older age group in 1992 and 29 percent in 1982;
- in 2002, roughly 74 percent of Iowa farmland was free of debt, which is more than in 1992 or 1982; and
- anticipated methods of farmland transfer include switching from bequeathing land to family members to giving or selling land to family members.

I. Introduction

From the earliest days of the Republic, the importance of land ownership has been debated. The Founding Fathers felt ownership of property was important enough to make it a necessary condition to vote.[1] Land ownership was viewed by private landowners as an exclusive right, often under the assumption that all rights were held completely by the landowner. As contemporary societies have become increasingly connected across geographical space, the idea of a landowner holding most, if not all, rights increasingly has given way to allowing others to assert ownership of some of the sticks in the bundle of property rights. These conflicts have made land ownership and tenancy of great interest to policymakers. Because of these conflicts in philosophy and perspective, surveys regarding land ownership and tenure in Iowa have been conducted several times over the past half century.

The 2002 Land Ownership Study carries on the tradition of surveys conducted in 1949, 1958, 1970, 1976, 1982, 1992 and 1997. The 1958 Iowa survey began looking at regions within Iowa as identified by the 1950 U.S. Census of Agriculture. This same regional approach has been continued, allowing for the observation of regional developments. These regular studies concerning land ownership are unique to Iowa.

Each of the earlier surveys was conducted to accomplish several objectives. In addition to considering many of the objectives covered in earlier surveys, the 2002 study was carried out as a result of legislation passed by the Seventy-Third Iowa General Assembly. The Legislature passed Chapter 319, Section 71 of the Acts of the General Assembly in 1989 which was amended in 1992, Chapter 1080, Section 1 to read:

Iowa Code

> Iowa State University of Science and Technology shall conduct continuing agricultural research to provide information about environmental and social impacts of agricultural research on the small or family farm and information about population trends and impacts of the trends on Iowa agriculture, in addition to research that may include the categories specified in Section 266.39B, Subsection 2. The research shall include an agricultural land tenure study conducted every five years to determine the ownership of farmland, and to analyze ownership trends, using the categories of land ownership defined in Chapter 9H. The study shall be conducted on the basis of regions established by the university. A region shall be composed of not more than twenty-three contiguous counties.

• Farmland Ownership and Tenure Background

The circumstances surrounding this study are of particular importance. The 2002 study was conducted during a time when a significant portion of net farm income came from government payments. In two of the previous five years, average net farm income would have been negative without government payments. Over the period from 1998 to 2002, government payments provided an average of 86 percent of net farm income in Iowa.

Government commodity programs are tied to the level of farm production. In addition, the emergency payments of the preceding five years also were linked to production. As such, the government payments are directly tied to the land. This has had significant impacts on land values and rents.

Land values in 2002 continued the trend started after the farm crisis in the 1980s. The average land value reported in 2002 was the second highest ever recorded in Iowa.[2] This was in spite of the relatively low prices in the previous years. Corn prices averaged $2.22 in 2002 but they had averaged below $2.00 for the previous four years. Similarly, soybean prices averaged $5.54 in 2002 but had averaged below $5.00 in the previous four years.

• Dimensions of the Study: Ownership and Tenure

The 2002 study continued the analysis from the previous studies examining both land ownership and tenancy. The results of the 1982 and 1992 studies are compared with the analysis presented here. The 1997 results also are examined but, in the interest of simplicity in comparison, only the decade numbers 1982, 1992, and 2002 are presented.

The concept of "land tenure" refers to the manner in which or the period for which rights in land are held. Additionally, land tenure consists of the social relations and institutions governing access to and ownership of land. Tenure describes the rights the landowner maintains or the rights given to the tenant. With increased environmental protection emphasis, several modifications in tenure arrangements have developed including acquisition of easements by private and governmental organizations to obtain partial interests in land. Also, in recent decades professional farm managers have been entrusted with property management and some of the rights of the landowner by acting as the owner's agent. For all of these reasons, and because a substantial portion of farmland is leased, tenancy aspects of land ownership are analyzed in detail in Chapter V.

[1] The introductory sections draw heavily from previous survey reports. For the 1997 survey, see C. Pieper and N. Harl, *Iowa Farmland Ownership & Tenure 1982-1997: A Fifteen-Year Perspective*, Iowa State University Department of Economics (1997).

[2] Iowa Land Value Survey, 2002; Iowa State University Extension Publication, FM 1825.

II. Survey Methods

• The 2002 Survey

The 2002 survey was conducted by telephone in the same manner as the 1992 study and was carried out by the Iowa State University Statistical Laboratory. Telephone interviews were conducted between November 2002 and February 2003. All questions were asked in reference to land owned on July 1, 2002. Survey questionnaires were completed by trained telephone interviewers who edited and checked the responses for inconsistencies.

Table 2.1 compares the 1958, 1970, 1976, 1982, 1992, 1997, and 2002 Iowa farmland ownership surveys in terms of their survey method, number of landowners in the sample, number of usable responses, and percentage of usable responses.[3] The 1949 survey results were conducted for the entire Midwest; therefore, the 1949 study was not comparable to the surveys in Table 2.1 that were conducted for Iowa alone.

Table 2.1: Comparison of usable response rates obtained in land ownership surveys

Year	Method of survey	Landowners in sample (number)	Usable responses (number)	Usable responses (percent)
1958	Mail	11,022	2,576	23.40
1970	Mail	12,520	3,216	25.68
1976	Mail	4,392	1,503	34.22
1976	Phone	1,044	743	71.16
1982	Phone	1,065	992	93.14
1992	Phone	1,053	940	89.27
1997	Phone	861	656	76.19
2002	Phone	795	633	79.62

Survey respondents were selected from a general sample of landowners. Of 795 selected landowners, 633 interviews were completed for the 2002 land ownership survey, as shown in Table 2.1.

• General Sample Selection

All agricultural land owned in Iowa had the opportunity to be included in a previous 1988 general sample. In 1988, parcels of land in each county were scientifically chosen on a random basis. These parcels also were employed in the 1992, 1997, and 2002 surveys. The sample unit or parcel was a quarter of a quarter section of land: a 40-acre tract. The same 705 sample units surveyed in 1992 were used in the 1997 and 2002 surveys. Persons owning land within this sample unit were then identified and became the respondents for the survey.

The state was divided into seven regions ranging in size from seven to 23 counties. Within regions, the sample was allocated to counties in approximate proportion to their geographic areas (excluding non-farmland areas). The largest county, Kossuth, had 18 sample units whereas the 15 smallest counties had five samples each. The determined number of sample units was selected in two stages. The first stage assured a geographic dispersal of sample sections over the county in a systematic manner. The second stage selected a single 40-acre unit at random within each sample section within each county.

Legal descriptions of selected 40-acre parcels from this sampling procedure were sent to county auditors who were asked to provide information about the owners of land within the sample 40-acre units. The owners of record or their representatives as identified by the county auditors were then surveyed as respondents.

Some 40-acre sample units had multiple owners. Where there was more than one owner of a portion of the 40-acre unit (other than husband and wife), one owner was randomly selected for inclusion in the demographic description portion of the survey to be used for weights calculations. The sampling design for selecting a person among all the owners of the parcel was equal-probability sampling.

[3] See the following for discussions of past year surveys:

T. Jackson, *Iowa Farm Ownership and Tenure*, Iowa State University Department of Economics Thesis (1989);
B. D'Silva, *Factors Affecting Farmland Ownership in Iowa*, Iowa State University Department of Economics Thesis (1978);
R. Strohbehn, *Ownership Structure of Iowa Farm Land*, Iowa State University Thesis (1959).

• Geographical Regions Used in 2002

Iowa was divided into seven geographical regions in the 1958 survey, using regions identified in the 1950 U.S. Census of Agriculture. The composition of these regions was continued in the 2002 survey. Figure 2.1 shows the regions that are used throughout the survey and are described as:

1. Northwest Region – 10 counties including Lyon, Sioux, O'Brien, Plymouth, Cherokee, Buena Vista, Woodbury, Ida, Sac, and Carroll.
2. Southwest Region – 11 counties including Monona, Crawford, Harrison, Shelby, Audubon, Pottawattamie, Cass, Mills, Montgomery, Fremont, and Page.
3. Northern Region – 7 counties including Osceola, Dickinson, Emmet, Kossuth, Clay, Palo Alto, and Hancock.
4. North Central Region – 13 counties including Pocahontas, Humboldt, Wright, Franklin, Calhoun, Webster, Hamilton, Hardin, Greene, Boone, Story, Dallas, and Polk.
5. Southern Region – 19 counties including Guthrie, Adair, Madison, Warren, Marion, Adams, Union, Clarke, Lucas, Monroe, Wapello, Jefferson, Taylor, Ringgold, Decatur, Wayne, Appanoose, Davis, and Van Buren.
6. Northeast Region – 16 counties including Winnebago, Worth, Mitchell, Howard, Winneshiek, Allamakee, Cerro Gordo, Floyd, Chickasaw, Fayette, Clayton, Butler, Bremer, Black Hawk, Buchanan, and Delaware.
7. Eastern Region – 23 counties including Grundy, Dubuque, Marshall, Tama, Benton, Linn, Jones, Jackson, Clinton, Cedar, Jasper, Poweshiek, Iowa, Johnson, Scott, Muscatine, Mahaska, Keokuk, Washington, Louisa, Henry, Des Moines, and Lee.

• Statistical Analysis

For this survey, land ownership was measured in acres that were held in only one ownership type. All of the acres identified by the respondent were added to the ownership type given and included acreage other than that owned in the 40-acre sample unit. The types of ownership are sole owner, joint owners (husband and wife only), other co-ownership, partnership, life estate, unsettled estate, trust, corporation, limited liability company, and limited liability partnership. The amount of acres owned in a different ownership type or agricultural land leased from others was not considered in this study. For sole owner respondents, the study only considered the amount of acres owned solely by the respondent. Respondents were reminded throughout the survey that the land being discussed was only that land owned in a particular ownership category. The term "farm" was replaced with "farmland owned in this type of ownership."

Congruent with this separation of farm and ownership type, the statistical method used was based on the percentage of farmland owned. This maintains continuity with the 1992 survey. Under this method, a clearer picture of farmland ownership is possible. Specific examples of percentage of farmland owned include the percentage of land owned by sole owners, the percentage of land under a cash rent lease arrangement, and the percentage of land enrolled in conservation and other government programs.

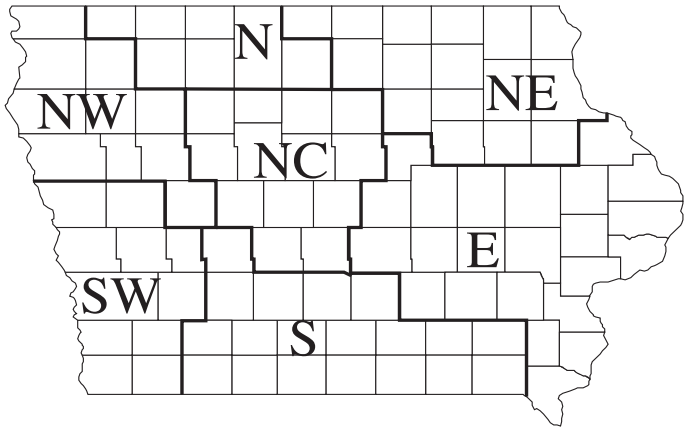

Figure 2.1: Iowa regions used in 1958, 1970, 1976, 1982, 1992, 1997 and 2002 survey

The 2002 study was conducted in a manner similar to the 1982 and 1992 studies. Telephone survey methods were utilized to contact the identified respondents. Many questions were worded and asked in exactly the same way as in the previous studies to maintain comparability and avoid undue bias.

In the analysis of the data, some respondents chose not to answer some questions or responded that they did not know the answer. Therefore, the responses, when estimated for the percentage of farmland owned, do not always total 100 percent. All analysis was completed using the percentage of farmland for statistical weighting.

In order to compare the dispersion of an entire set of data with the dispersion of another set of data, a relative measure of dispersion is required. This relative measure, referred to as the coefficient of variation, is essential when the sets of data to be compared are expressed in different units or when the data are in the same units but are of different orders of magnitude. Coefficient of variation calculations are computed by dividing the standard deviation by the mean of the data set. A higher coefficient of variation shows more variation and uncertainty in the estimate because the relative dispersion is greater. If the estimate was 0.0 percent, the coefficient of variation could not be calculated and was left blank. Coefficients of variation are calculated and appear in Appendix D.

Hypothesis testing is another statistical tool used to determine if change is significantly different from zero and at what levels. Changes from 1982 and 1992 to 2002 were tested at the 5 percent level for significance and are noted in the tables by an asterisk (*). A hypothesis test that is significant at the 5 percent level indicates fairly strong evidence that the true change is not zero, or states that an examiner of the test can be 95 percent confident the true change is other than zero.

III. Land Ownership

The first data analyzed in this study reveal the ownership patterns from the 2002 Farmland Ownership Survey. The following areas of farmland ownership are considered:

- Ownership type,
- Tenancy,
- Method of financing, if relevant,
- Method of acquiring the land,
- Length of ownership, and
- Size of owned acreage.

This study focuses on the characteristics of the landowner analyzed in relation to the land owned. Many past studies have focused on the percentage of landowners, but this study continues the 1992 Iowa farmland study's use of the percentage of farmland owned. This approach allows a clearer focus on the changes occurring in the ownership structure of the land.

• Ownership Type

Land is held in many different ownership arrangements. This study presents the arrangements as revealed in the survey using nine different ownership types. The categories are then combined or altered as needed to allow comparison with past studies. The ownership categories surveyed were:

1. Sole owner,
2. Joint owners (husband and wife only),
3. Other co-ownership,
4. Partnership,
5. Life estate,
6. Unsettled estates,
7. Trust,
8. Corporation,
9. Limited liability company,
10. Limited liability partnerships, and
11. Government owned.

Joint tenancy of agricultural land in Iowa predominantly involves a husband and wife as joint tenants. Joint tenancy other than husband and wife is included in the "other co-ownership" category along with tenancy in common ownership, thereby maintaining continuity with past studies. Through the right of survivorship, ownership is passed to the surviving tenant at the death of the first to die.

Tenancy in common differs from joint tenancy in that the right of survivorship does not apply. Upon the death of a tenant in common, the rights of ownership pass to the deceased tenant's heirs or are distributed under the deceased's will instead of passing necessarily to surviving tenants in common.

Another type of co-ownership is ownership in partnership and is included in the partnership category. A general partnership is defined as an organization of two or more persons to carry on as co-owners of a business for profit. General partnerships involve unlimited liability of the individual partners for the liabilities of the partnership. A limited partnership provides limited liability to limited partners not participating in management and control. The final category, limited liability partnership, provides an exemption of liability from co-partner's acts.

Trusts are an instrument that can hold the ownership of the land during the life, or after the death, of the landowner. With the establishment of a trust, legal title to property is placed in the hands of a trustee with the property to be used for the benefit of specified beneficiaries.

Estates are, in many respects, similar to trusts. Unsettled estates identified in the survey also are included in the estate category.

This survey looked at corporations as a general group, although corporations are divided into various categories as defined in Chapter 9H of the *Code of Iowa*. The categories include family farm corporations, authorized farm corporations, nonprofit corporations, and other types of corporations. Table 3.1 presents the survey results for corporate owners of farmland. Based on this survey, it is estimated that 7 percent of Iowa farmland is owned by corporations. Compared with the 1992 and 1982 surveys, the amount of farmland of this type has decreased from 8 percent but this was not a statistically significant decrease.

Table 3.1: Percentage of farmland owned by land ownership type, 1982, 1992, 2002

Ownership type	1982	1992	2002
	Percentage		
Sole owners	41*	38*	28
Husband and wife	39	38	37
Other joint/co-owners	7*	7*	12
Partnerships	<1*	2	2
Estates	4	3	4
Trusts	1*	5*	8
Corporations	8	8	7
Limited liability company			1
Government owned			1

* Denotes significant difference relative to 2002 figure at the 5 percent level

Sole and joint owners continue to own the majority of the state's farmland at a combined 65 percent with sole owners at 28 percent and joint owners at 37 percent. These numbers are down from the 1992 survey, which reported 76 percent for the combined groups when 38 percent was owned by each of the ownership types. Tenants in common held 12 percent of the farmland in 2002. Estimates for the remaining farmland owned by the other categories are trusts (8 percent), estates (4 percent), partnerships of all types (2 percent) and LLCs (1 percent). Table 3.1 compares the 1982, 1992, and 2002 survey results.

Tenants in common and trusts were the two categories of ownership that showed statistically significant increases in 2002 compared to 1982 and 1992. The growth in partnership ownership was significantly different in 2002 compared to 1982 but not in comparison to 1992. The implications of these changes will be discussed later. It can be speculated, however, that the growth in tenants in common and trusts is related to the changing ownership of Iowa farmland. As owners pass the land to their children, it is still held in the family but not by a single entity.

• Tenure

Tenure encompasses ownership and tenancy of farmland. Chapter V covers tenancy more thoroughly; therefore, only a general overview of owner-operator and leasing arrangements is offered here as such arrangements relate to all Iowa farmland.

The data in Table 3.2 indicate a continued shift toward non-owner operators as the percentage of leased land has increased since 1982. Owner-operators who are farming manage an estimated 41 percent of Iowa farmland. This decline from 55 percent in 1982 is significant at the 5 percent level as is the decline from 1992. The 2002 study shows 41 percent of the farmland being operated by owners. The balance, 59 percent of the land, is farmed under landlord-tenant agreements. Another variation in the form of tenure involves management of farmland by professional farm managers. Professional

Table 3.2: Tenure of Iowa farmland, 1982, 1992, 2002, as a percentage of farmland for all owners[a]

Ownership type	1982	1992	2002
	Percentages		
Owner operators	55*	50*	41
Cash rent lease	21*	27*	40
Crop share lease	21	22*	18
Other type lease	1	1	1

[a] Excludes land in government programs and custom farmed acres
*Denotes significant difference relative to 2002 figure at the 5 percent level

farm managers supervise the renting of the land to the tenant, acting as an agent for the owner. The landowner is typically removed from the decision-making process, with the manager overseeing the tenant directly. Table 3.3 shows that the percentage of land managed by farm managers across the state for all ownership types decreased from 5 percent in 1992 to 4 percent in 2002 but was higher than the 2 percent managed in 1982. The change from 1982 to 2002 was statistically significant at the 5 percent level.

For corporation-owned land, farm manager use increased from 9 percent in 1992 to 14 percent in 2002. It is interesting to note that although the percentage of land under a professional farm manager decreased slightly, the actual number of acres under a professional farm manager increased. Based on the U.S. Census of Agriculture, the total land in farms decreased from 1992 to 2002, and this is why the percent under professional farm managers decreased even though the acres increased.

Table 3.3: Percentage of all farmland managed by a professional farm manager by ownership type, 1982, 1992, 2002[a]

Ownership type	1982	1992	2002
	Percentages		
All ownership types	2*	5	4
Non-corporate	2*	4	4
Corporate	6*	9	14

[a] Includes both limited liability corporation and corporations
* Denotes significant difference relative to 2002 figure at the 5 percent level

• Methods of Financing Iowa Farmland

Interest rates for purchasing farmland were approximately 6.5 percent at the time of the 2002 study. Iowa farmland values have continued to rise since the farm debt crisis. In this environment, the 2002 study analyzes the financial structure of land ownership.

Farmland was classified into three groups in terms of financing arrangements existing on the land:

1. Free of debt,
2. Being purchased through a purchase contract or contract for deed, or
3. Being purchased with a loan secured by a mortgage on the land.

The data for each of these groups involve only debt against the land.

Purchase contracts are agreements between the buyer and seller for the transfer of property. Most of these contracts are held between individuals.

The other option for farmland purchase is the traditional secured loan from a third-party lender or mortgagee. Under mortgages, the mortgagor holds the title. For purchase contracts, the purchaser may or may not hold title. Table 3.4 shows the percentage of land owned in each of these groups.

Table 3.4: Finance methods as a percentage of farmland, 1982, 1992, 2002

Finance method	1982	1992	2002
	Percentage		
Free of debt	62*	70*	74
Under contract	18*	11*	4
Mortgaged	20	19	22

* Denotes significant difference relative to 2002 figure at the 5 percent level

The percentage of land without debt continued to increase in 2002 relative to both 1982 and 1992. In 2002, nearly three-fourths of the land (74 percent) was held without debt. This was significantly higher than in both 1982 and 1992.

The amount of land held under a purchase contract continues to decrease. In 2002, just 4 percent of the land was under a contract. This is significantly lower than in 1982 (18 percent) and 1992 (11 percent).

The amount of land under a mortgage has remained relatively constant. In 2002, 22 percent of the land was under a mortgage, whereas in 1982 there was 20 percent with a mortgage.

• Methods of Acquiring Iowa Farmland

Four different modes of acquisition were examined:

1. Land was purchased,
2. Land was received as a gift from a person living at the time of the transfer,
3. Land was inherited, or
4. Land was obtained in some other manner.

Purchased land may involve a purchase contract, a note and mortgage, or land that is purchased for cash. Gifts assume a living donor at the time of the gift. Inherited land could have been acquired through a trust, will, or other instrument that passes legal title to the land at death. Other methods of acquisition involve purchase at less than fair market value or acquisition in a like-kind exchange. Table 3.5 shows percentage estimates for these acquisition methods.4

Twenty-eight percent of the land was acquired without encumbrance by gift or inheritance, and 72 percent was acquired by purchase.

Table 3.5: Method of acquisition as a percentage of Iowa farmland, 1997, 2002

Acquisition method	1997	2002
	Percentage	
Purchased	62	72
Gifted	3	3
Inherited	35	25
Other	<1	<1

• Length of Ownership

Length of ownership is an important indicator of ownership turnover. The 2002 study documented the changes in land ownership. Table 3.6 shows the current pace of ownership turnover. Using July 1, 2002 as a cutoff date, an estimated 28 percent of the land has been acquired since 1992. From 1983 to 1992, 24 percent of Iowa farmland was acquired by the current owner. Notice that 15 percent of the land has been acquired during the past four years, whereas 30 percent was acquired before 1972.

Table 3.6: Percentage of Iowa farmland surveyed in 2002, acquired during specified periods

Period during which current owner acquired land	2002
	Percentage
1998-2002	15
1993-1997	13
1983-1992	24
1973-1982	18
1972 and earlier	30

• Size of Owned Acreage

The acreage sizes shown here are only those owned under the one ownership type identified by each respondent at the beginning of the survey.

The size of owned acreages varies widely in the study, but traditionally land was described and transferred in 40-acre tracts. Table 3.7 follows that pattern by dividing acreages in multiples of 40. Also, this allows comparison with earlier studies. Forty-acre units sampled in some instances had multiple owners. There are statistically significant changes at the 5 percent level from 1992 to 2002 at every acreage size. Change in acres owned is one of the few items analyzed in this study in which such significance was shown throughout all categories. Acreages under 80 acres and between 81 and 240 acres have decreased since 1982, while acreages from 241 to 600 and greater than 600 acres have increased. These numbers are consistent with the acres per farm obtained from the 2002 Census of Agriculture.

The very smallest group, less than 80 acres, has dropped significantly since 1982. The second acreage category, 81 to 240 acres, actually increased from 1982 to 1992 but then dropped significantly from 1992 to 2002. The percentage of land in this category is now lower than it was in 1982, although this difference is not statistically significant. The percentage of land in the largest two categories has grown significantly in each decade.

Table 3.7: Percentage of Iowa farmland owned in various tract sizes, 1982, 1992, 2002

Sizes (acres)	1982	1992	2002
	Percentage		
80 and under	40*	31*	13
81-240	38	44*	36
241-600	17*	19*	35
>600	5*	6*	16

* Denotes significant difference relative to 2002 figure at the 5 percent level

[4] Question for Table 3.5 was not asked in the 1982 and 1992 surveys.

• Summary

Chapter III examined land ownership patterns and analyzed changes from 1982, 1992, and 2002. The following conclusions may be drawn.

- Sole and joint owners are the major landowners in Iowa with combined ownership of 65 percent of all farmland.
- The percent of farmland that is owner-operated has decreased from 55 percent in 1982 to 50 percent in 1992 and 41 percent in 2002.
- The amount of farmland held without debt continues to increase, rising from 62 percent in 1982 to 70 percent in 1992 and 74 percent in 2002. The decades of increases in debt-free land are statistically significant. The amount of land under a purchase contract has dropped significantly since 1982, from 18 percent in 1982 to 11 percent in 1992 and just 4 percent in 2002. The amount of farmland with a mortgage has remained essentially unchanged over the past two decades.
- The amount of all farmland acquired through gift or inheritance was 28 percent, and the remaining 72 percent was purchased by the current owners.
- The number of small landholdings has fallen sharply: in 2002, 49 percent of Iowa farmland was owned in sizes less than 240 acres and a slightly larger portion, 51 percent, owned in sizes greater than 240 acres. This compared with 75 percent owned in sizes less than 240 acres in 1992.

IV. Demographics

This chapter focuses on the characteristics of Iowa farmland owners and their demographics including age, residency, education, and occupation. The demographics of owners are expressed on the basis of the percentage of farmland owned. Demographics for the 1982 and 1992 studies are given, and the 2002 study is compared with the two previous studies.

The demographics analyzed include:

- The age of the owner and age cross-tabulated with the size of landholdings and financing methods used to acquire land,
- Residency and occupancy (whether the land is owned by residents of Iowa and if they live on the land they own),
- Highest education completed and education cross-tabulated with age,
- Occupation, and
- Gender and marital status.

• Age

The age of a landowner can reflect probabilities of land transfer in the future. Land ownership turnover is of interest to state and local leaders because it may reflect conditions in the agricultural economy and carries implications for agriculture's future in the state. Tenure of the land tends to change with the stage in the life cycle as measured in years. Transfer and tenure of land are both age-sensitive.

In 1982 approximately 11 percent of Iowa's farmland was owned by people 34 years old or younger. (Table 4.1) In 1992 the percentage of land owned by people in this category had dropped to just 7 percent. And, in 2002 only 3 percent of the farmland was owned by people in the younger-than-34-years-old category.

The percentage of land held by those in the mid-stage years, 35 to 64 years old, also dropped, although the magnitude of the drop depended upon the specific age category. The two youngest age categories in the mid-stage dropped significantly from 1982 to 2002, however the drop from 1992 to 2002 was not statistically significant. The percentage of land held by those in the 55 to 64 age bracket actually increased from 1982, but the changes from both 1982 and 1992 to 2002 were not statistically significant. Overall the percentage of land held by those in the mid-stage dropped from 59 percent in 1982, to 50 percent in 1992, and to 49 percent in 2002.

Ownership by the late-stage age group, 65 years and older, increased from 29 percent in 1982, to 42 percent in 1992, and to 48 percent in 2002. These results support the high percentage of land shown as acquired in the last 10 years in Table 3.6 and the continued turnover in land ownership that can be expected in the near future in Iowa farmland ownership as land is necessarily transferred at death, if not before.

Table 4.1: Percentage of farmland by age of farmland owners in stages of the life cycle, 1982, 1992, 2002

Ownership type	1982	1992	2002
		Percentage	
Early stage:			
< 25 years	1	1	0
25-34 years	10*	6*	3
Mid-stage:			
35-44 years	14*	11	10
45-54 years	23*	18	16
55-64 years	22	21	23
Late-stage:			
65-74 years	17*	23*	24
> 74 years	12*	19*	24

* Denotes significant difference relative to 2002 figure at the 5 percent level

Owners over 75 years of age have increased their acreage owned from 12 percent in 1982 to 24 percent in 2002. This increase is statistically significant at the 5 percent level. In 2002, almost half (48 percent) of the farmland in Iowa was owned by people over the age of 65. And, almost a quarter (24 percent) of the land was owned by people over 75 years old. For a more detailed discussion, see Chapter V concerning land tenancy patterns and age and Chapter VI for more detail on the anticipated transfer of farmland in Iowa cross-tabulated with age.

• Age Cross-Tabulated with Acreage Size

For every group of landowners–early, mid-, and late stage, their percentage of farmland decreased in the 0-99 acre size category, as shown in Table 4.2. This trend continued for the 100- to 279-acre sizes. In 2002, the mid- and late-stage landholders had most of their land in the 100- to 279-acre size category. The early stage was almost indistinguishable in terms of the percent of the land held in the various size categories.

Table 4.2: Percentage of farmland owned by age cross-tabulated with size of owned acreage, 1992, 2002

	Years of age					
	<35		35-64		>65	
Size (acres)	1992	2002	1992	2002	1992	2002
	Percentage					
0-99	2	1	20	7	15	7
100-279	3	<1	20	18	21	18
280-519	1	1	8	12	5	14
>519	<1	<1	3	12	1	8

• Age Cross-Tabulated with Financing Method

As indicated in Chapter III, equity in land is an important factor in obtaining capital, enhancing financial stability, and facing market risks. Table 4.3 cross-tabulates age and financing method. The percentage of debt-free land increased substantially for those over 65 years old. But, the percentage for the mid-stage owners slightly decreased and the percentage of land held debt free by those in the early stages remained unchanged from 1992. The percentage of land held under mortgage increased for the mid-stage landowners while it decreased for both the early- and late-stage landowners. The percentage of land held under contract decreased for all age categories.

Table 4.3: Percentage of Iowa farmland owned by age cross-tabulated with financing method, 1992, 2002

	Years of age					
Finance method	< 35		35-64		> 64	
	1992	2002	1992	2002	1992	2002
	Percentage					
Debt-free	1	1	30	29	39	43
Contract	3	<1	8	4	1	<1
Mortgage	3	2	13	16	3	4

Looking at 2002 data, early-stage landowners have approximately 29 percent of their land debt free, 14 percent under contract, and 57 percent owned through mortgages. On the other hand, mid-stage owners have 59 percent of their land debt free, 8 percent under contract, and 33 percent with a mortgage. Finally, late-stage owners have 91 percent of their land debt free, 1 percent under contract, and 8 percent mortgaged. These percentages are calculated by dividing the percentage owned in each category by the percentage owned in each stage for the three respective age groups.

• Residency of Iowa Farmland Owners

Ownership of Iowa land by non-residents has been a concern of the Iowa General Assembly. Table 4.4 shows the percentage of farmland owned by U.S. citizens and the percentage owned by non-Iowa residents.

Table 4.4: Percentage of farmland owned by residents of Iowa, 1982, 1992, 2002

Occupancy	1982	1992	2002
	Percentage		
U.S. citizen and Iowa resident[a]	94*	91*	81
Non-Iowa resident	6*	9*	19

[a] Respondent lives year-round in Iowa

* Denotes significant difference relative to 2002 figure at the 5 percent level

In the 2002 study, one instance of non-U.S. citizen ownership was noted. This correlates with the Iowa Department of Agriculture and Land Stewardship data, which show one-tenth of one percent of Iowa farmland owned by noncitizens. Nationwide, nonresident aliens own 1 percent of all U.S. farmland.

Table C.14 in Appendix C summarizes ownership of the land in the survey by residents and nonresidents by ownership type. Nonresidents own more land than residents as a percentage in the following ownership categories: other joint/co-ownership, partnerships, trusts, and corporations.

The percentage of Iowa farmland owned by residents of the state has changed, declining from 94 percent in 1982 to 91 percent in 1992 and 81 percent in 2002. Nonresident owners own 19 percent of Iowa farmland as of 2002. Increases in the percentage of non-Iowa residents are statistically significant at the 5 percent level for each period.

• Owner Occupancy of Farmland

Another important aspect of ownership as a corollary to residency is whether the owner lives on the land being surveyed. (Table 4.5) Most landowners live on the land surveyed or other farmland they own under a different ownership structure. But, the percentage of farmland held by owners living on their own land has decreased 10 percentage points from 1982 to 2002. Also, as owned acreage size increases, it is inferred that there are fewer landowners. The 2002 study shows that 55 percent of owners live either on the surveyed farmland or other farmland they own. This is an increase from 54 percent in 1992, but a decrease from the 63 percent in 1982. A pattern of fewer owners living on land they own is statistically significant at the 5 percent level from 1982 to 2002 period.

Table 4.5: Percentage of farmland occupied by owners, 1982, 1992, 2002[a]

Occupancy	1982	1992	2002
	Percentage		
Live on land surveyed	57*	48	47
Live on other farmland owned	6*	6*	8
Do not live on owned farmland	37*	46	45

[a] Excludes land under government ownership

* Denotes significant difference relative to 2002 figure at the 5 percent level

Table 4.6 shows the distribution of Iowa farmland ownership by the size of the community in which the owner lives. As shown in Table 4.6, 55 percent live on farms and another 5 percent live in rural, unincorporated areas. Thirteen percent of the farmland is owned by those who live in small towns and another 15 percent by those who live in mid-size communities. Nine percent of the land is held by owners who live in larger cities.

Table 4.6: Location of owner residence, 2002[a]

Owner residence	2002
	Percentage
Farm	55
Rural	5
Town less than 2,500	13
Town 2,500-10,000	9
Town 10,000-50,000	6
City over 50,000	9
Unknown	2

[a] Excludes land under government ownership

• Highest Formal Education Level Completed

Table 4.7 shows that the education levels of landowners as a percentage of farmland owned have generally increased. This is illustrated by an increase from 1982 to 2002 of the percent of farmland held by owners with post-high school education. In the 2002 study, 7 percent of the farmland was owned by people with a graduate degree. The percent of land whose owners had a bachelor's degree doubled, land owned by those with some college experience increased slightly and the percentage of farmland owned by high school graduates remained unchanged from 1992. During the same period, the percent of land whose owners did not complete high school dropped. Landowners with bachelor's degrees, high school graduates, and those not completing high school were all changes found to be statistically significant at the 5 percent level during the 1982 to 2002 period. The largest percentage of farmland owners, 42 percent in 2002, have completed high school.

Table 4.7: Percentage of farmland owned according to highest formal educational level completed, 1982, 1992, 2002[a]

Education	1982	1992	2002
	Percentage		
Graduate degree	7	6	7
Bachelor's degree	10*	9*	18
Some college	18*	24	26
High school degree	48*	42*	42
High school not completed	17*	16*	7

[a] Excludes land under government ownership

* Denotes significant difference relative to 2002 figure at the 5 percent level

Table 4.8, comparing 1992 and 2002, shows that the educational level increased during that decade for the percent of land held by all landowner age groups. Land with graduate degree-level owners remained constant in percentage of ownership in every age group from 1992 to 2002. Land held by owners with some college decreased in the early stage, but showed a modest increase in the mid- and late-stage periods.

Table 4.8: Percentage of farmland owned by educational level cross-tabulated with life-cycle stages, 1992, 2002[a]

	Years of age					
	< 35		35-64		> 64	
	1992	2002	1992	2002	1992	2002
Education degree	**Percentage**					
Graduate degree	<1	<1	4	5	2	2
Bachelor's degree	2	1	5	11	3	6
Some college	2	1	13	15	9	10
HS graduate	3	1	23	18	16	23
HS not completed	0	<1	4	1	12	7

[a] Excludes land under government ownership

The percentage of land held by high school graduates in the early and mid-stages fell, but increased in the late-stage period. Finally, the 1992 to 2002 period showed a decrease in land held by all stages of owners who had not completed high school.

• Occupation

Of interest concerning occupations is the connection between farming-related occupations and farmland owned by those in these occupations. Landowners were asked about the principal occupation they were engaged in during most of their adult life. Their responses were analyzed in relation to the number of acres owned.

Table 4.9 reveals a statistically significant reduction from 1982 to 2002 in the percent of farmland owned by those who are principally farmwives/housewives. The percent of farmland owned by farmer/farm managers had a significant offsetting increase over the same time period. Farmland owners in the professional/technical occupation category, or ownership by clerical occupation owners increased slightly.

Table 4.9: Occupation of farmland owners as a percentage of farmland owned, 1982, 1992, 2002[a]

	1982	1992	2002
	Percentage		
Wife	31*	34*	21
Farmer	35*	30*	39
Professional/technical	12	12	14
Clerical	4*	4*	6
All other occupations	18*	21	20

[a] Excludes land under government ownership

* Denotes significant difference relative to 2002 figure at the 5 percent level

• Gender and Marital Status

Iowa farmland owned by females decreased slightly from 1992 to 2002. These changes in Table 4.10 show no statistically significant differences for males or females in either period.

Table 4.10: Gender distribution of farmland ownership by percentage of farmland owned, 1982, 1992, 2002[a]

Gender	1982	1992	2002
		Percentage	
Female	47	49	47
Male	53	51	53

[a] Excludes land under government ownership

In Table 4.11 gender is cross-tabulated with age to see if changes occurred in ownership among the three different age groups by gender in both periods.

Table 4.11: Gender cross-tabulated with age as a percentage of farmland owned, 1992, 2002[a]

	Years of age					
	< 35		35-65		> 65	
Gender	1992	2002	1992	2002	1992	2002
	Percentage					
Female	3	1	22	21	24	25
Male	4	3	29	28	19	23

[a] Excludes land under government ownership

In both survey years, the percentage of land held by females was higher in the late-stage landowners. For the early- and mid-stage owners, males held a higher percentage of the farmland. The percentage of land held by females was lower in the early and mid-stages from 1992 to 2002 but not in the late stage.

The percentage of farmland owned by persons who had never married decreased from 1982 to 1992, but remained unchanged from 1992 to 2002, as shown in Table 4.12. The percentage of farmland owned by those separated and/or divorced increased significantly from 1992. In 2002, 4 percent of Iowa's farmland was owned by persons who were either divorced or separated.

Table 4.12: Marital status of Iowa landowners by percentage of farmland owned, 1982, 1992, 2002[a]

Marital status	1982	1992	2002
		Percentage	
Married	77	75	77
Widowed	14	17	15
Never married	7	3	3
Separated/divorced	2	3*	4
Non-respondents[b]	1	1	n/a

[a] Excludes land under government ownership
[b] This category includes deceased spouses, minor children, and refusals
* Denotes significant difference relative to 2002 figure at the 5 percent level

• Farming Status

In 2002 the majority of Iowa's farmland owners did not farm. As shown in Table 4.13, 55 percent of the owners did not farm. The remainder of the owners was nearly equally distributed between those who farm full time or part-time. The full-time farmer-owners were slightly higher at 24 percent versus 21 percent of the owners being part-time farmers.

The percentage of land by the farming status of the owner did not change by the size of the farmland holding (Table 4.14). In all the categories the majority of the owners did not farm. The major difference was that for the small categories (less than 100 acres and 100 to 279 acres), the majority of the farming owners were part-time farmers. For the larger acreage categories, the majority of the farmers were full-time farmers.

Table 4.13: Farming status of farmland owners, 2002[a]

Farmer status	2002
	Percentage
Full-time farmer	24
Part-time farmer	21
Does not farm	55
Child	<1

[a] Only sole owners, owner interviewed, and joint husband/wife owners are included

Table 4.14: Farming status of farmland owners cross-tabulated with operator farm size (in acres), 2002 [a, b]

	<100 acres	100-279 acres	280-520 acres	>520 acres
		Percentage		
Full-time farmer	2	7	8	7
Part-time farmer	3	8	5	5
Does not farm at all	10	22	12	10

[a] Results reflect percentages of owner operators only
[b] Land included is land both owned and rented by the owner-operator

• Summary

Current demographics of Iowa farmland owners can be summarized by the following:

- Individuals more than 75 years old owned 24 percent of Iowa farmland in 2002 compared with 19 percent in 1992 and 12 percent in 1982. Individual owners over 65 years of age own 48 percent of Iowa farmland compared with 42 percent in 1992 and just 29 percent in 1982.
- Early-stage landowners have 29 percent of their land debt free, mid-stage owners have 59 percent of their land debt free, and late-stage owners have 91 percent of their land debt free.

- Among respondents, 81 percent of Iowa farmland owners consider themselves residents of Iowa and 47 percent live on farmland they own.

- Males have increased their percentage of Iowa farmland owned from 51 percent in 1992 to 53 percent in 2002, and males in the mid-stage age group own the largest portion of Iowa farmland at 28 percent. They are followed closely by females in the late-stage with 25 percent of the farmland.

- Married persons owned 77 percent of Iowa farmland in 2002.

V. Farmland Leasing

Because of the increasing number of landowners leasing farmland to others, the 2002 study continues the analysis of landowners participating in lease or rental arrangements. This chapter focuses on land that is not owner-operated. Three general lease categories are considered: 1) cash rent lease, 2) crop share lease, and 3) other rental arrangements. It is recognized that many leases represent modifications of the traditional cash rent or share rent, but respondents were asked to characterize the lease on the basis of its predominant characteristics. Land farmed by a custom operator was not considered to be leased.

Table 3.2 shows that leasing expressed as a percentage of all Iowa farmland has been increasing since 1982 and is in conjunction with Table 5.1. With the increased use of lease or rental arrangements, many policy issues arise. A few of these issues include tenant production incentives, environmental impacts and, possibly, different goals among landlord, tenant, and the public.

Another important issue relating to lease and rental practices is the formality of the agreement. Forty percent of owners interviewed in 2002 reported that they had no formal lease agreement; rather, it was verbal in nature.

Table 5.1 reveals the percentages of leased farmland under the various lease arrangements. Cash rent leases are found on 69 percent of leased farmland. Crop share arrangements are utilized on an additional 30 percent and 1 percent of leased farmland is under other rental arrangements. Changes from 1982 to 2002 are statistically significant at the 5 percent level for cash rent and crop share arrangements.

Table 5.1: Percentage of leased Iowa farmland under different lease arrangements, 1982, 1992, 2002

Tenancy arrangement	1982	1992	2002
	Percentage		
Cash rent	49*	54*	69
Crop share	49*	44*	30
Other rent arrangements	2	2	1

* Denotes significant difference relative to 2002 figure at the 5 percent level

During this period the distribution of rent type has changed dramatically. In 1982, the distribution between cash and crop share rent was identical. By 1992 this distribution had changed to 54 percent cash and 44 percent crop share. The cash rent continued to increase and in 2002 it represented 69 percent of all leased land.

• Land Under Lease Agreements

Cash rental agreements have been a popular choice among landowners since the 19th Century. Under cash rental agreements, as the name implies, the landlord generally receives a set amount of cash rent in return for transferring the use of the land to a second party, the tenant. Often, the payment is made in two installments: one in the spring and a second payment following harvest. Additionally, government farm program payments generally go to the tenant under cash rental arrangements. Under the cash rental arrangements, owners of land can have professional farm managers ensure that the land is cared for and intercede as the owner's agent who deals with the tenant directly.

Crop share leases are the second major arrangement in the leasing of farmland. Under crop share leases, both owner and tenant share in the expense and income of the crop. Many different arrangements exist and are generally negotiated specifically between the two parties. Because sharing of expenses and income exists, greater risk is assumed by the landlord. Equity issues between tenant and landlord often are a driving force under this arrangement.

Other rental arrangements include various hybrids of the two lease options discussed previously. Additionally, livestock share leases are a part of "other rental arrangements."

These three categories are used to encompass all farmland leased for agricultural purposes and are cross-tabulated with other important owner characteristics.

• Ownership Type

Table 5.2 shows ownership type and their lease methods. Sole owners lease 31 percent of the Iowa farmland that is leased, based on the 2002 study. Sole owners are followed by joint owners at 30 percent, other co-owners at 13 percent, partnerships with 2 percent, estates with 6 percent, trusts with 11 percent and corporations with 7 percent.

Table 5.2: Percentage of leased Iowa farmland owned by land ownership type cross-tabulated with lease method, 2002

Ownership type	Cash rent	Crop share	Other renting[a]	Total
	Percentage			
Sole owners	22	9	<1	31
Husband and wife	21	8	<1	30
Other joint/co-owners	9	4	0	13
Partnership	2	<1	0	2
Estates[a]	4	2	<1	6
Trusts	7	4	<1	11
Corporations	3	3	1	6
Limited liability companies	<1	0	0	<1
Government owned	1	<1	0	1

[a] Includes life and unsettled estates

• Age

Landowners 65 years of age and older own 60 percent of all leased farmland. The mid-stage age group has the second largest amount of leased land ownership at 36 percent. Younger landowners, 34 years of age and younger, own 2 percent of the farmland leased. These estimates are contained in Table 5.3.

Table 5.3: Percentage of leased Iowa farmland owned by lease method cross-tabulated with age group, 2002[a]

Age group (years)	Cash rent	Crop share	Other renting	Total
		Percentage		
< 35	1	1	0	2
35-64	26	9	<1	36
> 64	41	18	1	60

[a] Missing percentages are accounted for in government holdings

• Gender

Gender is cross-tabulated with lease methods in Table 5.4. Females own 54 percent of farmland leased whereas males own 46 percent of leased farmland. This result follows the pattern of a national study finding ownership of leased farmland to be higher for females.

Table 5.4: Percentage of leased Iowa farmland owned by gender cross-tabulated with lease method, 2002

Gender	Cash rent	Crop share	Other renting	Total
		Percentage		
Male	32	14	<1	46
Female	37	15	1	54

• Regional Distribution of Leased Land

In order to get a better idea of how much land is leased in each region, regional estimates were generated. The estimated percent of land leased by region can be compared with the 59 percent shown in Table 3.2 for the entire state. Iowa's estimated percentages of leased land by region are as follows: northern region (77 percent), north central region (65 percent), eastern region (56 percent), northeastern region (52 percent), northwest region (50 percent), southwest region (48 percent), and the southern region (36 percent). (Table 5.5)

Table 5.5: Percentage of leased Iowa farmland by region cross-tabulated with lease method, 2002[a]

Region	Cash rent	Crop share	Other renting	Total by region	Percent farmland leased
			Percentage		
NW	8	2	<1	10	50
SW	5	6	<1	11	48
N	9	4	<1	13	77
NC	11	7	<1	18	65
S	7	3	<1	10	36
NE	13	3	<1	15	52
E	17	5	0	22	56

[a] Rental acres weighted by percentage of Iowa farmland

• Education

Iowa farmland owners with graduate degrees own 8 percent of leased farmland. Bachelor degree holders own 17 percent, owners with some college own 24 percent, high school diploma holders own 41 percent, and owners who had not completed high school own 10 percent of leased Iowa farmland. Estimates for the type of lease cross-tabulated with owner's education level are found in Table 5.6.

Table 5.6: Percentage of leased Iowa farmland owned by owner's education level cross-tabulated with lease method, 2002

Education level of leasing owners	Cash rent	Crop share	Other renting	Total
		Percentage		
Graduate degree	5	3	<1	8
Bachelor's degree	10	7	<1	17
Some college	18	6	<1	24
HS diploma	29	11	1	41
No HS diploma	8	2	<1	10

• Owner Residency of Leased Farmland

In 2002, Table 5.7 shows Iowa residents owned 70 percent of all leased farmland of which 50 percent was under cash rent leases, 19 percent was leased under crop share arrangements, and 1 percent was under other arrangements. Nonresidents also had a higher percentage of leased land, 19 percent, under a cash rent arrangement as compared with 10 percent under crop share arrangements. Nonresidents leasing land are estimated at 30 percent as compared with nonresident ownership of all farmland at 19 percent.

Table 5.7: Percentage of leased Iowa farmland by state of residency, cross-tabulated with lease method, 2002

State of residency	Cash rent	Crop share	Other renting	Total
		Percentage		
Iowa resident	50	19	1	70
Non-Iowa resident	19	10	<1	30

• Length of Tenant's Tenure

Another area of interest is the length of tenure of Iowa farmland tenants. Estimates for tenant tenure duration are contained in Table 5.8. Historically, concern has been expressed that the state does not do enough to assist tenants in maintaining the stability of agriculture by intervention in this area. Owners holding 6 percent of leased land say their tenant has leased land for only a one-year period. Table 5.8 shows that tenants on 27 percent of leased land have tenure ranging from 2 to 5 years, tenants on 24 percent of leased land have tenure from 6 to 10 years, and tenants on 28 percent of leased farmland have tenure between 11 and 20 years. Fourteen percent of leased farmland had tenant tenure greater than 20 years. The final category, multiple tenants/ multiple tenure lengths, shows the percentage of leased land with multiple tenants and/or a varied number of years the tenant(s) have farmed the land. This category encompasses 9 percent of leased farmland.

Table 5.8: Percentage of leased Iowa farmland by length of tenant's tenure cross-tabulated with lease method, 2002

Tenure length of tenant	Cash rent	Crop share	Other renting	Total
		Percentage		
One year	6	<1	n/a	6
2-5 years	23	4	n/a	27
6-10 years	15	9	n/a	24
11-20 years	18	10	n/a	28
>20 years	6	8	n/a	14
Multiple tenants/ tenure lengths	--	--	n/a	--

• Finance Method

Table 5.9 can be contrasted with Table 3.4, the percentage of Iowa farmland by finance method. Almost three-fourths of all farmland is debt free and 83 percent of leased land is debt free. Land under contract is 4 percent of all farmland, but only 2 percent of leased farmland. Twenty-two percent of farmland is mortgaged, but only 15 percent of leased farmland is mortgaged. These numbers suggest that unencumbered land is more likely to be leased.

Table 5.9: Percentage of leased Iowa farmland byfinance method cross-tabulated with lease method, 2002

Finance method	Cash rent	Crop share	Other renting	Total
		Percentage		
Debt free	55	27	1	83
Contract	2	<1	0	2
Mortgage	12	2	1	15
Other financing	<1	0	0	<1

• Occupancy of Farmland

The majority of leased farmland (60 percent) is owned by people who do not live on a farm. Table 5.10 also shows that 33 percent of the leased farmland is owned by those who still live on the surveyed farm. Finally, seven percent of the leased farmland is owned by people who live on another farm.

Table 5.10: Percentage of leased Iowa farmland by location of owner's residence cross-tabulated with lease method, 2002

Occupancy	Cash rent	Crop share	Other renting	Total
		Percentage		
Live on farmland surveyed	24	9	<1	33
Live on other farmland owned	5	2	0	7
Do not live on surveyed farmland or other farmland owned	40	19	1	60

• Principal Occupations of Leasing Landowners

A final analysis of leased farmland concerns the principal occupation of the landowners and is shown in Table 5.11. Farmwives own 21 percent of all farmland and they own 25 percent of leased farmland. By contrast, farmers own 39 percent of all land and they own 32 percent of the leased land. Professional/technical occupation owners have 15 percent of leased land compared with 14 percent of land ownership. Six percent of leased and owned land is owned by clerical occupation owners. "Other occupation" landowners own 20 percent of all farmland and 21 percent of leased farmland. (See Table 4.9 for farmland ownership percentages).

Table 5.11: Percentage of leased Iowa farmland by owner-occupation, cross-tabulated with lease method, 2002

Principal occupation	Cash rent	Crop share	Other renting	Total
		Percentage		
Farmwife/ housewife	17	7	<1	25
Farmer/manager/ rancher	22	10	1	32
Professional/ technical	9	6	<1	15
Clerical	5	1	<1	6
Landowners in other occupations	16	5	<1	21

• Summary

This chapter analyzed leased land, land that is not owner-operated, and the characteristics of the owners of leased land. The following are some of the highlights of leased land:

- Cash rental arrangements continue to be the predominant choice of landowners, totaling 69 percent of all leased land.
- Individual owners aged 65 years and older account for ownership of 60 percent of leased farmland.
- Females own 54 percent of leased farmland in Iowa and farmwives/housewives own 25 percent of the leased land. Besides farmers, this is the highest percentage of any of the occupational categories.
- Nonresidents of Iowa own 30 percent of the leased farmland.
- Land free of debt is more likely to be leased than land being financed.

VI. Anticipated Transfer Methods of Farmland Ownership

Farmland owners were asked about anticipated future transfer of their farmland. These transfer plans may change in response to many different factors, both economic and noneconomic, and reflect situations existing at the time of the study.

The 1982, 1992, and 2002 studies all asked respondents about how they anticipated transferring farmland. Table 6.1 shows that willing the land to the family is still the most popular anticipated method for transferring farmland in Iowa. However, the percentage of farmland that will be transferred in this manner has been decreasing over the past two decades. The drop from 48 percent to the current 39 percent of the farmland to be willed is a statistically significant decline. Selling the land to others is the only other category that showed consistent decrease from 1982 to 1992 and to 2002. The decrease from 1982 to 2002 is significant. Willing the land to others (non family) has increased significantly over the past two decades, but it still remains relatively small in terms of the anticipated method of transferring land.

It is interesting to note in Table 6.1 that there was a change in anticipated transfer methods from 1982 to 1992 but that many of the categories that showed an increase then actually showed a decrease from 1992 to 2002. There are many factors that influence the current owner's anticipated transfer methods. Changes in capital gains tax rates and other tax policies will all have an influence. It is evident from Table 6.1 that owners will respond to such changes.

Table 6.1: Anticipated transfer methods by percentage of farmland, 1982, 1992, 2002

Transfer method	1982	1992	2002
	Percentage		
Will to family	48*	49*	39
Will to others	<1*	1*	2
Give to family	5*	4*	12
Give to others	<1*	<1*	1
Sell to family	12	7*	12
Sell to others	13*	10	9
Put in trust	6*	14	13
Other	11*	1*	7
Do not know	5*	15*	5

* Denotes significant difference relative to 2002 figure at the 5 percent level

Age was cross-tabulated with anticipated transfer method in Table 6.2 in order to isolate owners 65-74 years of age and those owners 75 years of age and older. Forty-eight percent of all Iowa farmland is equally divided between these two age groups. The older group, 75 years old and older, anticipates willing 22 percent of the land they own; whereas the younger group, 65-74 years of age, anticipates willing 21 percent of the land they own.

Table 6.2: Anticipated transfer methods by owners over 65 years of age as a percentage of owners over 65 years of age, 2002

Transfer method	65-74	Over 74	Total
		Percentage	
Will to family	21	22	43
Will to others	1	1	2
Give to family	7	6	13
Give to others	1	<1	1
Sell to family	5	4	9
Sell to others	6	3	9
Put in trust	6	4	10
Other	4	5	9
Do not know	3	2	5

Both age groups combined anticipate transferring 45 percent through wills. In these two combined age groups, 12 percent of the land is anticipated to be, or already is, in trusts. A nearly equal percentage of older landowners, 5 percent, do not know how they anticipate transferring the land and 8 percent say they will transfer it through other means. Slightly less than 16 percent anticipates selling the land to family and others and 13 percent of the combined age groups anticipate transferring their land as a gift.

• Summary

This chapter discusses anticipated methods to transfer farmland. The trends are summarized as follows:

- In 2002, anticipated methods for farmland transfer show increased percentages of land being gifted and sold compared with 1992. The most frequently anticipated method of transfer remains the willing of land to family members, with 39 percent of all farmland in this category.

For landowners 65 years and older, 46 percent of their farmland will be willed to another party, 18 percent will be sold, and 12 percent of the farmland will be put into a trust.

VII. Conservation and Easement Programs

The 2002 farm bill continued many of the current conservation programs that were in existence from prior bills. Of these programs, the Conservation Reserve Program (CRP) is the most extensively used program. In Iowa it was reported that just over 1.8 million acres, approximately 5.9 percent of Iowa cropland, were in the CRP.

The 2002 land ownership survey asked participants whether or not the land was in the CRP or one of the other government conservation programs that are available. Approximately 7 percent of all Iowa farmland was in some form of conservation program in 2002.

Table 7.1 compares the percentage of all farmland with the farmland in the CRP or other government conservation programs by ownership type and financing methods as analyzed in the 2002 survey. The biggest difference found between the conservation farmland and all farmland is the percent owned by joint tenants. Joint tenants own 37 percent of all farmland but they own 47 percent of the conservation acres. There was relatively little difference between financing methods for all farmland or land in conservation programs.

Table 7.1: Comparison of percentage of all Iowa farmland and government conservation program farmland (CRP, etc.) by ownership type and financing methods, 2002[a]

Characteristic	All farmland	Government conservation farmland
	2002	
	Percentage	
Ownership Type		
Sole owners	28	26
Joint tenants	37	47
Tenants in common	12	8
Partnerships	2	2
Estates	4	5
Trusts	8	4
Corporations	7	7
Limited liability companies	1	<1
Financing methods		
Free of debt	73	74
Under contract	5	2
Through mortgage	22	24

[a] Excludes land under government contract

A more specific analysis of CRP participation by farmland owners is given by age and gender patterns in Table 7.2. The percentage of CRP owners, by age category, matches very closely with the percentage of all owners by age.

The percentage of owners by gender also is presented in Table 7.2. The percentage of CRP owners by gender is almost the reverse of the percentage of all owners. In 2002, all owners were 53 percent male and 47 percent female. The CRP and conservation program owners were 48 percent male and 52 percent female.

Table 7.2: Comparison of age and gender between all owners and CRP landowners (percent of owners), 2002

Characteristic	All owners	CRP owners
	2002	2002
	Percentage	
Age group		
<35	3	1
35-64	52	53
>65	45	46
Gender		
Male	53	48
Female	47	52

Table 7.3 repeats the categories from Table 7.2 except that the data is now for the percent of land rather than percent of owners. The mid- and late-stage age categories show some differences based on acres. The mid-stage owners comprise 52 percent of the owners and hold 49 percent of the land. They represent 53 percent of the conservation farmland owners and hold 56 percent of the conservation land. The late-stage owners show the opposite pattern of having slightly larger amounts of land with respect to all farmland, but having slightly smaller landholdings in the conservation programs.

Table 7.3: Comparison of age and gender between all owners and CRP landowners (percent of land), 2002

Characteristic	All owners	CRP owners
	2002	2002
	Percentage	
Age group		
<35	3	1
35-64	49	56
>65	47	43
Gender		
Male	53	55
Female	47	45

Table 7.3 shows an equal division of land was found with farmers in terms of gender. However, the male owners tend to own larger tracts of land in the conservation programs than the female owners. Conservation landowners were 48 percent male. But, 55 percent of the conservation land was held by males.

The 1992 study showed that 67 percent of the land in the CRP was free of debt. The 2002 results showed
this percentage increases to 74 percent of CRP farmland in the debt-free category.

• Summary

This chapter discussed participation in conservation programs. The trends are summarized as follows:

- The conservation programs remain popular among landowners. Just over 7 percent of all Iowa farmland is enrolled in a government conservation program.

- In 2002, 74 percent of farmland in conservation programs is debt free.

Females are a majority of the owners in CRP and other conservation programs. But, males have the most acreage within the CRP or other conservation programs.

VIII. Summary, Comparisons, and Recommendations

This study focused on the changes in Iowa land ownership and tenure between 1982, 1992, and 2002. The analysis included land owned by type of ownership, tenure of the land, demographics of land owners, farmland acquisition, and anticipated transfer methods. The study also examined conservation programs. This final chapter briefly summarizes the survey methods, reviews the major conclusions from the 2002 study, contains policy implications of the results, and recommends avenues for future studies.

• Summary of the Survey Methods

Selection of survey respondents concerning land ownership and tenure was made using a general sample selection of all Iowa farmland owners.

The general sample selection utilized 633 scientifically selected, 40-acre tracts that were randomly chosen. Legal descriptions of the selected tracts were sent to county auditors who then provided information about the owners of the agricultural land in those tracts. Where there were multiple owners within the same sample unit, respondents were chosen from among those who owned land within the 40-acre sample unit used for agricultural purposes.

• General Conclusions

Three major conclusions can be made regarding farmland ownership and tenure based on the 2002 study. The structure of land ownership is very dynamic as land turnover increases and different ownership structures are utilized by new owners. Second, tenure of farmland continues a rapid shift toward tenant control of production agriculture and diminished owner involvement. And the increasing age structure shows no sign of changing and continues to move towards an older population of landholders. This means that the changes we have been witnessing over the past two decades are likely to continue and may well accelerate.

The change in the structure of land ownership is most evident in the significant decrease in the percent of land owned by sole owners. At the same time there has been a significant increase in the farmland held by tenants in common or in trusts. It can be hypothesized that this is occurring as more of the land is passed to the next generation that is not currently farming the land. Some members of this generation do not appear ready to sell the land, so they hold the land as tenants in common or the land is placed into a trust until such time as it is disposed of or transferred to another owner.

This line of action, passing the farm to a new generation not inclined toward farming, also is shown by the increase in non-Iowa residents' ownership of land. We have seen a significant shift from Iowa to non-Iowa ownership.

Closely tied to the changing structure is the shift toward more rented land. People who own the land but do not wish to farm it will rent the land to someone else. This is occurring not only because of the passing of the land to a new generation of owners but also because of the nature of production agriculture. Today's production agriculture, for the most part, is characterized by tight margins. The response to these tight margins has been to increase volume. Often it is not possible to increase the volume through land that is currently owned; therefore, land rental becomes the most viable alternative for many farmers. This demand for rented land fuels the change in tenancy that we are witnessing.

Not only are we witnessing a change in overall tenancy, we are witnessing a substantial movement away from crop share rent toward cash rent. In the past 20 years, we have seen a shift from a nearly equal division of rented land between cash and crop share land to the situation in 2002 when almost 70 percent of the rented land is cash rented. And, 37 percent of all Iowa farmland is cash rented in 2002. The movement to cash rent can be attributed to a number of factors. The shift of landowners to non-Iowa residents means that the crop share form of rent is less attractive. A nonresident crop share landlord cannot readily check on the crop and often may not want a share of the crop but would prefer cash. Another possible reason for the shift towards cash rent is the ease of execution. A tenant with multiple landlords or a landlord with multiple tenants will have a much easier time tracking the various properties if the arrangement is a simple cash rent.

The annual land value survey done by Iowa State University (ISU Extension Publication, FM 1825) has found a substantial increase in the level of investor purchases of farmland. The investor ownership is evident in both the type of ownership trends and the tenancy trends.

The increasing age of farmland owners shows that the current trends likely will continue for several years into the future. Almost one-half of the farmland in Iowa is owned by those over 65 years old. There is a strong indication that most of the land will pass to the next generation as determined by the current owner. Less than 10 percent of the farmland will be sold directly. It is not known what the next generation will do with the land. However, it is quite likely that some of it will be held and the trends of changing ownership patterns will continue or perhaps accelerate.

Women generally live longer than men. Therefore, we should expect that as the age of landowners continues to increase there will be a continuing change in the gender relationship of landowners.

Other studies have shown that farmers are more likely to depend upon income from the farm for their retirement income as opposed to selling the land. It is quite likely that as farmers age they will be less likely to want crops for their payment, and will prefer a cash lease.

Ongoing environmental concerns have supported the expansion of federal conservation programs by legislative action, and

landowners continue to show a willingness to participate in such programs. Additionally, other governmental and private organizations have provided avenues for landowners to protect farmland, improve wetlands, or conserve wildlife habitat. Partial interest transfers of farmland to farmland preservation and wildlife preservation groups have occurred in recent years.

• Major Policy Implications

Cash rent lease arrangements have increased substantially from 1982 to 2002. With more land under lease, young farmers may have more opportunities to begin a career in agriculture; however, diminished crop share rent increases the pressure on young farmers to borrow in order to operate. This pressure may reduce the probability of land entering young farmer's hands and increase the concentration of farmland control in financially established hands. Landowners are demonstrating less willingness to participate in the risks and rewards of share rent arrangements. Increased cash renting can extend the physical distance of the farmland owner from practices that are taking place on his or her land.

At the same time, cash rental agreement use is rising and the percentage of land that is owner-operated is falling. The loss of owner-operated land may affect purchasing habits of these owner-operated farm owners and, thus, the communities in which they live. The owner-operated farmland statistic is closely tied to the increased age of the landowners.

The current government commodity programs have been shown to have a significant impact on land values. These programs are tied to production and as such they become tied to the land values. There are many implications of this feature of the current programs. There is increased interest by investor purchasers of farmland. Investor ownership will change the structure of the ownership and operation of the farmland. There will be an increased use of cash rent due to investor ownership. Finally, the difficulties for beginning farmers trying to enter agriculture are exacerbated by this feature of the commodity program.

Trust ownership of land has increased from 1982 to 2002. Additionally, the percentage of farmland owners who anticipate transferring through trusts has increased. The reasons for increased trust usage are numerous. Tax consequences can be altered for the owner through the use of a trust. Owners may desire to skip a generation through trust use instead of using wills or gifts. Retirement needs also may be met through the use of trusts. Estate settlement may be simplified through the use of the living trust.

Age issues connected with farmland ownership continue to pose some of the most challenging questions to policymakers. Owners 65 years and older hold 48 percent of Iowa's farmland. Within the next 15 to 25 years, much of this land will be transferred. This study shows more than two-thirds of farmland will be transferred through wills and trusts. Roughly 60 percent of leased land is owned by this group. Tenancy likely will continue to increase with older land ownership. As farmland changes hands, methods and approaches to farming practices also may be impacted. Iowa will likely follow the national pattern in which a substantial proportion of older landowners rent out their land after the death of their spouse.

Another major change in land ownership occurred in the area of landowner's education level. Education levels of landowners are increasing at every level of education above those holding a high school diploma. Increased use of technology, more formal ownership structures, and environmental concerns will be high awareness issues for landowners, and will affect the future of Iowa farmland.

Ownership of acreages greater than 240 acres has increased dramatically in the 1982 to 2002 period. These acreage sizes now account for more than 50 percent of the farmland ownership. Acreages sized from 241 to 600 acres make up 35 percent of all farmland, up from 17 percent in 1982. Acreages greater than 600 acres amount to 16 percent in 2002, up from 5 percent in 1982. Turnover of farmland makes possible such ownership consolidation. Farmland ownership concentration appears to be following trends similar to other areas of the economy. The traditional family farm is experiencing many changes as these trends continue.

Ownership of Iowa farmland by nonresidents of Iowa continues to increase. Between 1982 and 2002, nonresident ownership increased from 6 percent in 1982 to 19 percent in 2002. Approximately 30 percent of leased land is owned by owners who are not residents of Iowa.

• Recommendations for Future Research

The 2002 study has produced insights into changes that should be considered in future studies. First, a clearer delineation of ownership types is needed to ensure proper evaluation of ownership structure and evolving patterns. An example of such a change would be the separation of all joint ownership from tenants in common. Continuity considerations are important, however, and any changes should be made with this factor in mind. Second, more detailed questioning of leasing practices is justified as the number of acres leased increases. Leasing of agricultural land for non-agricultural purposes has been one-half of 1 percent of all leased farmland, but the study of many aspects of agricultural leasing, easements, and other partial transfers of farmland rights needs to be expanded in future research. Questions concerning lease length, conditions, and specific arrangements (e.g., a combined category that could include owners who both cash rent and crop share) would provide greater insight into this economically important practice. Greater refinement of questions concerning the number of tenants and length of tenancy is important if the landlord/tenant relationship is to be fully understood. Another area of change worthy of increased study concerns transfer of farmland in the area of trusts. Trust ownership questions need to be broadened to gain additional information as their use expands. Finally, the impact of current commodity programs and alternatives on farmland ownership patterns needs to be addressed.

Appendix A:
Methodology Report for Iowa Land Ownership Survey

Introduction

The Iowa State University Center for Survey Statistics and Methodology conducted a statewide telephone survey of owners of farmland in Iowa. This report describes the survey methods used to design the sample, collect data, and create summary tables for the study. Section 2 describes the sampling design methodology for the study and the data collection procedures, and Section 3 discusses the weights calculations for the study and the overall margin of error of the survey.

Sampling Design and Data Collection Procedures

The target population for this study was all persons who own Iowa farmland being used for agricultural purposes as of July 1, 2002. Since no complete list of Iowa farmland owners is available, these persons were sampled through a two-stage area sampling design.

The first stage consisted of randomly selecting 705 40-acre plots in Iowa. This sample of plots had been selected and used for previous versions of the Iowa Land Ownership Survey, with the most recent survey conducted in 1997. The sampling design for this stage of the survey was simple random sampling without replacement. While most 40-acre plots contained one parcel, a small number contained multiple parcels.

The second stage of sampling consisted of determining and contacting the owners of the selected parcels of land. Legal descriptions of the selected plots were forwarded to appropriate county auditors to identify owners by name, address, and type of ownership. Then, the owner of record for each parcel was sent an advance letter describing the study, prior to the initial phone contact. (Telephone numbers were located by research staff using Internet resources.) In cases of multiple ownership (other than husband and wife), one owner was randomly selected for inclusion in the demographic description portion of the survey to be used for weights calculations. The sampling design for selecting a person among all the owners of the parcel was equal-probability sampling.

Prior to the data collection, interviewers were trained in the principles and procedures of telephone interviewing. All interviews were conducted using *Blaise* computer-assisted telephone interviewing (CATI) software. A manual of interviewing procedures and question by question specifications was used for training and as a reference throughout the interviewing process. The data collection period was from November 2002 through January 2003.

When contacting sample respondents, the Center for Survey Statistics and Methodology staff observed the following protocols. All phone numbers in the sample were rotated through a minimum of 12 call attempts. Non-working and incorrect numbers were identified, and placed in a tracking queue for additional attempts to locate. In some cases, letters were sent including a business reply postcard allowing respondents to return current phone numbers to research staff. Phone numbers that required multiple attempts were tried at various times (e.g., days and evenings, weekdays, and weekends). Numbers were classified as ring-no-answer if no one was reached after these attempts. If an answering machine was reached, additional attempts were made to that number to try to contact the respondent. Suspected fax lines and modems also were attempted at several additional and varied times to determine if they were actually the number needed to reach the respondent.

All interviews were conducted under the direct supervision of a telephone interviewing supervisor. Interviewers were monitored at random intervals as a quality control measure and were then edited by a supervisor. Discrepancies, omissions, and unclear responses were clarified with the interviewer if possible. CATI software was programmed to include edit checks to detect illegal values and logic errors as responses were entered into the computer during the interview. A data retrieval callback was made to the respondent by the original interviewer or supervisor when required. Simple frequencies, cross-tabulations, and edit checks were conducted to catch coding and data entry errors. Corrections in the data were made as inaccuracies were found.

Table A.1 describes the outcomes for the telephone survey. Of the 932 landowners initially selected in the sample, 109 were determined not to be eligible because their farmland was not

Table A.1: Telephone Survey Outcomes

	# Cases	Percent
Total tracts of Iowa farmland selected	705	
Total identified owners in sample	932	
Not eligible (land not used for agriculture)	109	
Not eligible (land not owned as of July 1, 2002)	28	
Total eligible owner respondents	795	100
Interviews completed	633	79.6
Eligible, refused to participate	16	2.0
Eligibility not determined, refused to screen	90	11.3
Government owned land, no respondent	7	0.9
Maximum call attempts, no interview	22	2.8
Owners not located	27	3.4

being used for agricultural purposes and 28 were not eligible because they didn't own Iowa farmland as of July 1, 2002. Twenty-two respondents were contacted multiple times, but no interview was obtained, and seven respondents were not interviewed because the land was government owned and a respondent could not be identified. An additional 27 owners were not located. The overall response rate for the 932 eligible owners was 79.6 percent. The contact rate for the survey was 84.3 percent and the cooperation rate of able and contacted respondents was 85.7 percent.

Weight Calculations and Survey Precision

As mentioned above, the sample design for this study is two-stage sampling, and thus the weights for the survey respondents will reflect these two selection stages. In the first stage, 40-acre plots of farmland were chosen, and the probability that a given parcel falls into such a randomly located plot is directly proportional to the size of the parcel. In other words, a 100-acre parcel of land is half as likely to be included in the sample as a 200-acre parcel. A small number of plots contained more than one parcel. Because this only happened for 163 out of the 705 plots, we will for simplicity treat the parcels as if they had been obtained in separate plots, i.e. each parcel is treated as an independently selected unit. For each parcel, one owner was selected to participate in the survey. Hence, we will be treating the sample of landowners as a one-per-cluster sampling design, with simple random sampling without replacement at each stage of selection.

The first stage sampling weight, w_1i, for parcel i is the inverse of the inclusion probability of the parcel, and is calculated as:

$$w\_1i = A/(n * a\_i\hat{}*)$$

where A is the total size (in acres) of all farmland in Iowa, obtained from the 1997 Census of Agriculture, n is the sample size and a_i^* = max(a_i, 40) with a_i the size of the parcel (in acres). In this calculation, we use a_i^* instead of a_i, because a small number of extremely small parcels resulted in weights that were unduly large. Only 163 parcel weights were affected by this adjustment. It is clear from the definition of w_1i above that the weighted sum of the parcel sizes should be equal to A by construction, and this is no longer quite true after this small-parcel weight adjustment. Hence, the weights w_1i for all the parcels were ratio adjusted so that the weighted sum of parcel sizes equals A.

Since many of the parcels are owned by an ownership group, and not just by one person, one of the owners was chosen using equal-probability sampling. For a parcel selected in stage one, the probability of selecting one of its owners is equal to one divided by the number of owners. The stage two weight is the inverse of this inclusion probability, so that the number of owners in the ownership group serves as the weight for each respondent:

$$w\_2i = N\_i$$

where N_i denotes the number of owners for parcel i.

The final sampling weight, w_i, is the product of both weights obtained above:

$$w_i = w\_1i * w\_2i$$

These weights were rounded through a standard cumulate and round procedure to obtain integer weights. The final weight w_i can be interpreted as the number of farmland owners represented by the ith respondent in the survey. In other words, a weight w_i of, say, 300 for the ith respondent means that there are 300 farmland owners with characteristics similar to those of that respondent in the population. Note that the sum of the weights w_i is an estimate of the total number of individual owners of farmland in Iowa. However, this estimate might be inflated because it assumes that owners do not appear in more than one ownership group. Because the probabilities of selection of the plots and the interviewed owners within plots are unequal, these weights were used in the calculation of the estimates of population characteristics for Iowa farmland owners and percentage of farmland owned.

Appendix B:
LAND OWNERSHIP QUESTIONNAIRE
2002

Types of Ownership

01 = Sole owner
02 = Joint tenancy (husband & wife)
03 = Tenancy in common
04 = Partnership (legal)
05 = Life estate
06 = Unsettled estate
07 = Trust
08 = Corporation
09 = LLC
10 = LLP
11 = Limited partnership

I. Land Ownership

1. Now I would like you to think of all the Iowa farmland you owned as a [**TYPE OF OWNERSHIP] [with name/s]** as of July 1, 2002. Do not include land owned in another manner. Please include land mortgaged, and land being purchased on contract, as well as any land owned free of debt. As of July 1, 2002, how many acres of Iowa farmland did you own as a [**TYPE OF OWNERSHIP] [with name/s]**?

   _____ acres

2. Of these acres….

   a. how many are fully paid for? _____

   b. how many are being bought under purchase contract or contract for deed? Do not include mortgaged land. _____

   c. how many are mortgaged? _____

   d. how many are owned under other financial arrangements? _____

   e. **ASK IF ACRES RECORDED IN 2d:**
   What is the other type of arrangement? **[OPEN ENDED]**

TOTAL NUMBER OF ACRES IN Q2a-d MUST EQUAL ACRES IN Q1.
IF DIFFERENT, PROBE TO RESOLVE.

3. How many acres of this land did you…

   a. purchase? _____

   b. receive as a gift from a person who was living at the time of the transfer? _____

   c. inherit? _____

   d. obtain in some other way? _____

e. ASK IF ACRES RECORDED IN Q3d:
How did you obtain these acres?

[**OPEN-ENDED]**

TOTAL NUMBER OF ACRES IN Q3a-d MUST EQUAL ACRES IN Q1.
IF DIFFERENT, PROBE TO RESOLVE.

4. Next, we would like you to think about how long you have owned this land (that is, the land you own **[TYPE OF OWNERSHIP]**). Please try to recall when you acquired the (first/next) parcel of this land.

a. What year was that? _____

b. How many acres was that? _____

[**REPEAT UNTIL ALL ACRES ARE ACCOUNTED FOR: What year did you get the next parcel of land (that you own as a [TYPE OF OWNERSHIP])?]**

(a) Year	(b) # Acres
1st	
2nd	
3rd	
4th	
5th	

TOTAL NUMBER OF ACRES IN Q4 MUST EQUAL ACRES IN Q1.
IF DIFFERENT, PROBE TO RESOLVE.

II. Land Use and Characteristics

1a. On July 1, 2002, did you live on any Iowa farmland that you owned as a **[TYPE OF OWNERSHIP**]?
1 = Yes → **[GO TO Q2]**
2 = No

b. Did you live on any other farmland that you (or your spouse) own?
1 = Yes
2 = No

2. Thinking of the land you own as a **[TYPE OF OWNERSHIP],** as of July 1, 2002, how many of these acres were being rented or leased for . . .

a. agricultural purposes, including farmsteads? _____ acres
b. industrial or commercial purposes? _____ acres
c. recreational purposes? _____ acres
d. some other purpose?
↓
e. What purpose was that?_____ _____ acres

3a. In 2002 were any of the acres that you own as a **[TYPE OF OWNERSHIP]** being handled by a professional farm manager?

1 = Yes → b. How many? (were handled by a professional farm manager) _____
2 = No **[GO TO Q4a]**

c. Is the professional farm manager paid a flat dollar fee, a percentage of the gross income, or in some other way?

1 = Flat dollar fee **[GO TO Q4a]**
2 = Percentage of gross income **[GO TO 3d]**
3 = Other **[GO TO 3e]**

d. IF 3c = 2, ASK: What percentage is paid to the farm manager?_____%

e. IF 3c = 3, ASK: How is the fee determined? **[OPEN-ENDED]**

4a. As of July 1, 2002, was any of the land that you owned as a **[TYPE OF OWNERSHIP]** in a government conservation program, like the CRP, WRP, or Equip?

1 = Yes → b. How many acres? (were in a government
2 = No **[GO TO Q5a]** conservation program _____

5a. In 2002, was any of the land you own as a **[TYPE OF OWNERSHIP]** being farmed or operated by you (or your spouse or any of the other owners)?

(This would include any land in field crops, livestock, pasture, farmstead, grove, as well as any acres that are custom farmed. CRP acres are not included here.)

1 = Yes
2 = No

b. How many acres do you operate in this way? _____

TOTAL NUMBER OF ACRES IN Q2a-d + 4b + 5b MUST EQUAL ACRES IN PART I Q1. IF DIFFERENT, PROBE TO RESOLVE.

IF NO ACRES ARE RECORDED IN Q5b, GO TO Q8a.
IF ACRES ARE OPERATED BY THE RESPONDENT (RECORDED IN Q5b), ASK Q6 & 7:

6a. In 2002 were any of the acres that you own as a **[TYPE OF OWNERSHIP]** being custom farmed?

1 = Yes → b. How many? (were custom farmed) _____
2 = No **[GO TO Q7a]**

7a. In 2002 were any of these acres (that you own as a **[TYPE OF OWNERSHIP]**) being farmed under a production contract, such as a contract with a seed company or food processing business?

1 = Yes → b. How many? (were under a production contract) _____
2 = No **[GO TO Q8a]**

8a. Sometimes people have transferred certain rights associated with their land to others. These rights are for nonagricultural uses such as mineral rights, electrical power lines, or pipelines. Transfers like this may be in the form of a deed, lease, easement or option.

Have any of the rights on this farmland been transferred to others?
1=Yes
2=No **[GO TO Q.9]**

		Yes	No
b.	Have mineral easement rights been transferred?	1	2
c.	**Have utility easements or options been transferred?**	1	2
d.	Have any other rights been transferred?	1	2

IF YES: e. DESCRIBE. (What other rights on this land have been transferred?) _____

9. Have any of the property rights on the land you own as a [TYPE OF OWNERSHIP] been placed in any of the following conservation easement programs:

			Yes	No
a.	the American Farmland Trust?	1	2	
b.	the Conservation League?	1	2	
c.	Ducks Unlimited?	1	2	
d.	Pheasants Forever?	1	2	
e.	the Iowa Heritage Foundation?	1	2	
f.	Any other conservation easement programs?	1	2	

IF YES: (g. What other programs?)
[OPEN ENDED]

IF NO TO ALL (9a-f), GO TO PART III.

h. How many acres does this involve? _____ acres

[IF NO RENTED ACRES IN PART II Q2a, GO TO PART IV.]

III. Rental Arrangements

You indicated that [FILL # from II.2a] acres of your land that you own as a [TYPE OF OWNERSHIP] were being rented or leased for agricultural purposes this year. Next I have several questions relating to those acres and the rental agreements that you have.

1. How many of those acres were rented out for **cash rent** this year (in 2002)?

_____ acres

ACRES HERE MUST BE < OR = ACRES IN QII.2a.

[IF NONE FOR CASH RENT, GO TO Q10]

2a. How many different tenants are involved? _____

b. IF MORE THAN ONE: Think of the tenant who rents the greatest number of these acres from you (for cash rent).

How many acres does that tenant rent from you? _____

3a. Are all of these acres located in **[FILL COUNTY]** County?

1 = Yes
2 = No → b. How many counties are they located in? _____

c. What counties are they? _____

4. How many rent payments do you receive per year (for the acres that are cash rented) from this tenant? _____
(ALLOW 1, 2 or 3)

5. Which months are the rent payments due? (Which month is the rent due?)
ALLOW FOR 3 MONTHS.

IF Q4 = 1, FILL 100 IN Q6a & SKIP TO Q7. IF Q4 = 2 OR 3, ASK:

6. What percentage of the rent is due at each payment?
   a. First payment _____ %
   b. Second payment _____ %
   c. Third payment _____ %

7a. How many years has this tenant been renting this land? _____ years

7b. Are you related to this tenant (either by blood or by marriage)?
1 = Yes
2 = No

7c. Is your rental agreement written or verbal?
1 = written
2 = verbal

8. Is the cash rent a fixed amount, or is it flexible, based on the yield or price?
1 = fixed amount
2 = flexible

9a. Is the rental agreement set for a fixed number of years?
1 = Yes, fixed number of years b. How many years is the lease for? _____ years
2 = No, indefinite, year-to-year, etc.

9c. How often do you (or the other owners) actually go to the site to check on this land during a typical farming season? Would you say, . . .

1 = never,
2 = once or twice,
3 = once a month,
4 = once a week, or
5 = daily?

9d. Which of the following best describes this tenant's overall farming operation? Would you say it is a large-scale operation with over 2000 acres, a medium-scale operation with 600 to 2000 acres, or a small-scale operation with less than 600 acres?
1 = large-scale operation with over 2000 acres
2 = medium-scale operation with 600 to 2000 acres
3 = small-scale operation with less than 600 acres

9e. Does this tenant raise only crops, only livestock, or both?
1 = crops
2 = livestock
3 = both crops and livestock

10. How many acres were rented on a **crop-share** basis? _____ acres

[ACRES IN III.1 + III.10 MUST BE LESS THAN OR EQUAL TO ACRES IN II.2a. IF NOT, ASK:
I'm sorry. I had recorded that you rented out [FILL # in II.2a] acres but I must have something wrong here. What is the rental situation with these acres? ADJUST AS NEEDED.]

[IF NONE ON CROP-SHARE, GO TO Q18.]

11a. How many different tenants are involved? _____

b. IF MORE THAN ONE: Think of the tenant who rents the greatest number of these acres from you (on crop share). How many acres does that tenant rent from you? _____

12a. Are all of these acres located in **[FILL COUNTY]** County?

1 = Yes
2 = No → b. How many counties are they located in? _____
c. What counties are they? _____

13. We are interested in how you are involved in your crop-share arrangement. First of all, what percentage . . .
IF RESP. DOES NOT USE OR DO THIS (e.g., do not custom combine, etc.), ENTER 888.

a. of the yield do you receive? _____ %
b. of the seed cost do you pay? _____ %
c. of the liming cost do you pay? _____ %
d. of any custom fertilizer application do you pay? _____ %
e. of other fertilizer costs do you pay? _____ %
f. of any custom pesticide spraying do you pay? _____ %
g. of other herbicide costs do you pay? _____ %
h. of other insecticide costs do you pay? _____ %

14. We are also interested in whether different farming decisions in your crop-share arrangement are made by you, by your tenant, or by the two of you together.

(First of all,) who decides what . . .	**Owner Only**	**Tenant Only**	**Together**	**Don't Do (NA)**
a. crops to plant?	1	2	3	8
b. seed variety to use?	1	2	3	8
c. fertilizer type and rate to use?	1	2	3	8
d. pesticide type and rate to use?	1	2	3	8
e. crop insurance to buy?	1	2	3	8

15a. Who pays for hauling your share of the crop (or yield) – you or the tenant?

1 = Respondent (owner)
2 = Tenant → b. Does the tenant haul your share . . .
1 = from field to farm,
2 = or from field to elevator?

16a. How many years has this tenant been renting this land? _____ years

16b. Are you related to this tenant (either by blood or by marriage)?

1 = Yes
2 = No

16c. Is your rental agreement written or verbal?

1 = written or
2 = verbal?

17a. Is the rental agreement set for a fixed number of years?

1 = Yes, fixed number of years b. How many years is the lease for? _____ years
2 = No, indefinite, year-to-year, etc.

17c. How often do you (or the other owners) actually go to the site to check on this land during a typical farming season? Would you say, . . .

1 = never,
2 = once or twice,
3 = once a month,
4 = once a week, or
5 = daily?

17d. Which of the following best describes this tenant's overall farming operation? Would you say it is a large-scale operation with over 2000 acres, a medium-scale operation with 600 to 2000 acres, or a small-scale operation with less than 600 acres?

1 = large-scale operation with over 2000 acres
2 = medium-scale operation with 600 to 2000 acres
3 = small-scale operation with less than 600 acres

17e. Does this tenant raise only crops, only livestock, or both?

1 = crops
2 = livestock
3 = both crops and livestock

18a. How many acres were rented out under some **other type** of arrangement? _____

b. (What was the arrangement?) **[OPEN-ENDED]**

ALL 3 TYPES OF RENTED LAND MUST EQUAL THE ORIGINAL TOTAL OF RENTED ACRES IN PART II, Q2a.

IV. Future Plans

1a. Think about the land you own as a [TYPE OF OWNERSHIP] that is being used for agricultural purposes. Do you think any of this land will be used for something other than agriculture within the next five years?

1 = Yes
2 = No [GO TO Q2]

b. About how many acres will be used for something else? _____ acres

c. What will this land be used for? **[OPEN-ENDED]**

2. Next, we would like you to think about how you anticipate transferring the ownership of the land that you own as a **[TYPE OF OWNERSHIP**]. Even though we know that these plans may change in the future, we would like to know how you **currently** expect to transfer the land.

Do you expect to…		YES/MAYBE	NO
a.	will any of it to a family member?	1	2
b.	will any of it to others?	1	2
c.	give any of it to a family member?	1	2
d.	give any of it to others?	1	2
e.	sell any of it to a family member?	1	2
f.	sell any of it to others?	1	2
g.	put any of it in a trust? (including living or testamentary trusts)	1	2
h.	do anything else? (i. what else do you plan to do? _____)	1	2

V. Respondent Characteristics

1. Now I have some background questions about you.
CODE GENDER. ASK IF UNSURE: Are you male or female?
1=Male
2=Female

2a. This past year, in 2002, did you farm full-time, part-time, or not at all?
1 = farmed full-time
2 = farmed part-time
3 = did not farm at all → **GO TO Q3a**

b. How many acres did you farm this year? _____ acres

c. Did you raise crops, livestock, or both?
1 = crops only
2 = livestock only
3 = both crops and livestock

d. About how many years have you been farming? _____

e. Are you also currently employed off the farm?
1 = Yes
2 = No
AFTER 2e, SKIP Q3, FILL "1 = Employed" IN Q4, & GO TO Q5.

3a. Q2a = 3, DID NOT FARM, ASK:
Have you ever operated a farm?
1 = Yes
2 = No → **GO TO Q4**

b. How many years did you farm? _____

[IF Q2a = 1 OR 2 (Farmed FT or PT), FILL "1 = Employed" IN Q4 & GO TO Q5.]

4. Are you currently . . .
1 = employed,
2 = unemployed,
3 = retired,
4 = disabled, or
5 = caring for your home or family?

5. What has been your primary occupation most of your adult life?
1 = Farming
2 = Homemaker
3 = Other (specify:_____)

6. What is your current age? _____

7. Are you currently . . .
1 = married or living as married,
2 = separated,
3 = divorced,
4 = widowed, or
5 = single and never been married?

IF PART II Q1a or b = Yes, FILL 1 IN Q8 & SKIP TO Q9.

8. Do you currently live . . .
1 = on a farm,
2 = in a rural area but not on a farm,
3 = in a town of less than 2500,
4 = in a town from 2500 up to 10,000,
5 = in a town of 10,000 up to 50,000,
6 = or in a city of 50,000 or more?

9. What is the highest level of education you have completed? Please include any college, vocational, or technical training.
1 = 11th grade or less
2 = High school (includes GED)
3 = Some post-high school but no 4-yr degree
4 = B.S., B.A., etc.
5 = Graduate degree completed (Masters, PhD, MD, etc.)

IF ADDITIONAL OWNER SELECTED FOR DEMOGRAPHICS, ASK Q10 - 18 PLUS Q37 BELOW. IF NO ADDITIONAL OWNER SELECTED, GO TO Q37.

10. Now I have a few similar questions about **[NAME2**].
RECORD GENDER. ASK IF UNSURE: Is **[NAME2]** male or female?

1=Male
2=Female

11a. This past year, in 2002, did **[NAME2]** farm full-time, part-time, or not at all?

1 = farmed full-time
2 = farmed part-time
3 = did not farm at all → **GO TO Q12a**

b. How many acres did (he/she) farm this year? _____ acres

c. Did (he/she) raise crops, livestock, or both?
1 = crops only
2 = livestock only
3 = both crops and livestock

d. About how many years has **[NAME2]** been farming? _____

e. Is (he/she) also currently employed off the farm?
1 = Yes
2 = No

AFTER 11e, SKIP Q12, FILL "1 = Employed" IN Q13, & GO TO Q14.

12a. Q11a = 3, DID NOT FARM, ASK:
Has (he/she) ever operated a farm?

1 = Yes
2 = No → **GO TO Q13**

b. How many years did (he/she) farm? _____

[IF Q11a = 1 OR 2 (Farmed FT or PT), FILL "1 = Employed" IN Q13 & GO TO Q14.]

13. Is **[NAME2]** currently . . .
1 = employed,
2 = unemployed,
3 = retired,
4 = disabled, or
5 = caring for home or family?

14. What has been **[NAME2]'s** primary occupation most of (his/her) adult life?
1 = Farming
2 = Homemaker
3 = Other (specify:_____)

15. What is **[NAME2']s** current age? _____

16. Is **[NAME2]** currently . . .
1 = married, living as married,
2 = separated,
3 = divorced,
4 = widowed, or
5 = single, never been married?

17. Does **[NAME2]** currently live . . .
1 = on a farm,
2 = in a rural area but not on a farm,
3 = in a town of less than 2500,
4 = in a town from 2500 up to 10,000,
5 = in a town of 10,000 up to 50,000,
6 = or in a city of 50,000 or more?

18. What is the highest level of education (he/she) has completed? Include any college, vocational, or technical training.
1 = 11th grade or less
2 = High school (includes GED)
3 = Some post-high school but no 4-year degree
4 = B.S., B.A., etc.
5 = Graduate degree completed (Masters, PhD, MD, etc.)

AFTER Q18, GO TO Q37 AND CLOSE.

DEMOGRAPHIC SECTION FOR JOINT TENANCY HUSBAND/WIFE OWNERS.

19. Now I have some background questions about you and your (spouse/husband/wife). RECORD GENDER. ASK IF UNSURE: First of all, are you male or female?
    1=Male
    2=Female

20. During the past year (in 2002), were either of you involved in farming?
    1 = Yes
    2 = No → **GO TO Q22a**

21a. Would you say that you, yourself, farmed full-time, part-time, or not at all?
    1 = Farmed full-time
    2 = Farmed part-time
    3 = Did not farm at all

b. How many acres did you (and your husband/wife) farm this year? _____ acres

c. Did you raise crops, livestock, or both?
    1 = crops only
    2 = livestock only
    3 = both crops and livestock

d. About how many years have you (either or both of you) been farming? _____

IF 21a = 1 OR 2 (RESPONDENT FARMS), ASK:

e. Are you also currently employed off the farm?

    1 = Yes
    2 = No

22a. IF Q20 = 2 (Did not farm), ASK:
Have you (and your husband/wife) ever operated a farm?

    1 = Yes
    2 = No → **GO TO Q23**

b. How many years did you farm? _____ **[THEN GO TO Q23]**

IF Q21a = 1 or 2 (Farms FT or PT), FILL "1 = Employed" IN Q23 AND GO TO Q24.
IF Q20 = 2 (No) OR Q21a = 3 (Did not farm at all), ASK:

23. Are you currently . . .
    1 = employed,
    2 = unemployed,
    3 = retired,
    4 = disabled, or
    5 = caring for your home or family?

24. What has been your primary occupation most of your adult life?
    1 = Farming
    2 = Homemaker
    3 = Other (specify:_____)

25. What is your current age? _____

26. FILL MARITAL STATUS 1 = Married

IF PART II Q1a or b = Yes, FILL 1 IN Q27 & SKIP TO Q28.

27. Do you currently live . . .
    1 = on a farm,
    2 = in a rural area but not on a farm,
    3 = in a town of less than 2500,
    4 = in a town from 2500 up to 10,000,
    5 = in a town of 10,000 up to 50,000,
    6 = or in a city of 50,000 or more?

28. What is the highest level of education you have completed? Please include any college, vocational, or technical training.
    1 = 11th grade or less
    2 = High School (includes GED)
    3 = Some post-high school but no 4-yr degree
    4 = B.S., B.A., etc.
    5 = Graduate degree completed (Masters, PhD, MD, etc.)

SPOUSE DEMOGRAPHICS.

29. Now I have a few similar questions about **[SPOUSENAME]**.
    FILL GENDER WITH OPPOSITE OF Q19 & CONTINUE.
    1 = Male
    2 = Female

IF Q19 = 1 (INVOLVED IN FARMING), ASK:

30a. This past year, in 2002, did **[SPNAME]** farm full-time, part-time, or not at all?
    1 = Farmed full-time
    2 = Farmed part-time
    3 = Did not farm at all □ **GO TO Q31**

IF Q30a = 1 OR 2 (FARMED FT OR PT), ASK:

b. Is **[SPNAME]** also currently employed off the farm?
    1 = Yes
    2 = No

IF Q30a = 1 or 2 (Farms FT or PT), FILL "1 = Employed" IN Q31 & GO TO Q32.
IF Q19 = 2 (No) OR Q30a = 3 (Did not farm at all), ASK:

31. Is [SPNAME] currently . . .
    1 = employed,
    2 = unemployed,
    3 = retired,
    4 = disabled, or
    5 = caring for home or family?

32. What has been **[SPNAME]'s** primary occupation most of (his/her) adult life?
    1 = Farming
    2 = Homemaker
    3 = Other (Specify:_____)

33. What is **[SPNAME]'s** current age? __ __

34. FILL MARITAL STATUS 1 = Married

35. **FILL WHERE SPNAME LIVES (FARM, TOWN SIZE) THE SAME AS Q27.**

36. What is the highest level of education (he/she) has completed? Include any college, vocational, or technical training.

1 = 11th grade or less
2 = High school (includes GED)
3 = Some post-high school but no 4-year degree
4 = B.S., B.A., etc.
5 = Graduate degree completed (Masters, PhD, MD, etc.)

ASK ALL:
This completes the interview. Is there anything you would like to tell us about the ownership of farmland that may be helpful to our project?

[OPEN-ENDED]

Thank you for your time today. Iowa State University appreciates your interest and cooperation with our study.

Appendix C:
Regional and Other Tables

Table C.1: Percentage of farmland owned in each ownership type, 2002 regional data

Ownership type	State	NW	SW	N	NC	S	NE	E
				Percentage				
Sole owners	28	3	4	3	4	4	5	6
Joint tenancy	37	3	3	3	5	8	7	9
Other co-owners	12	2	2	2	1	1	1	4
Partnerships	2	<1	<1	1	<1	<1	<1	<1
Estates	4	1	1	<1	1	<1	1	1
Trusts	8	1	2	1	1	1	<1	1
Corporations	7	1	1	1	2	1	1	1
Limited liability company	1	<1	<1	0	0	<1	<1	<1
Government owned property	1	<1	0	0	<1	<1	<1	<1

Table C.2: Percentage of all farmland owned by tenure, 2002 regional data[a]

Tenure	State	NW	SW	N	NC	S	NE	E
				Percentage				
Operate solely and with help	41	46	47	21	32	58	42	41
Cash rent	40	41	22	52	42	30	47	45
Crop share	18	11	30	27	25	11	10	14
Other renting	1	2	<1	<1	1	1	1	0

[a] Land held as CRP acres are excluded from this analysis

Table C.3: Percentage of farmland managed by a professional farm manager, 2002 regional data

Owners	State	NW	SW	N	NC	S	NE	E
				Percentage				
All owners	4	4	4	7	10	2	1	2
Non-corporate owners	4	2	4	4	9	2	1	2
Corporate owners	14	50	n/a	67	18	n/a	n/a	n/a

Table C.4: Percentage of farmland by financing method, non-corporate owners, 2002 regional data

Financing method	State	NW	SW	N	NC	S	NE	E
				Percentage				
Free and clear	74	72	73	70	82	60	79	74
Under contract	4	5	2	2	5	8	5	6
Through mortgage	22	23	25	28	13	32	16	19

Table C.5: Percentage of farmland by size of owned acreages, all landowners, 2002 regional data

Size of acreage	State	NW	SW	N	NC	S	NE	E
				Percentage				
<80 acres	13	12	6	13	17	9	16	17
80-240 acres	37	42	27	37	41	30	38	42
241-600 acres	34	30	35	39	31	33	36	33
>600 acres	15	16	32	10	11	27	9	8

Table C.6: Age cross-tabulated with size of acreage, as a percentage of all farmland, 2002

Size of acreage	<25	25-34	35-44	45-54	55-64	65-74	>75
				Percentage			
<80 acres	0	7	12	18	20	26	18
80-240 acres	0	2	12	16	21	22	28
241-600 acres	<1	3	9	18	21	28	22
>600 acres	1	2	11	14	32	24	16

Table C.7: Age cross-tabulated with tenure, as a percentage of all farmland, 2002[a]

Tenure	<25	25-34	35-44	45-54	55-64	65-74	>75
				Percentage			
Operate solely and with help	0	84	75	62	50	36	16
Cash rent	50	12	21	30	35	45	57
Crop share	50	4	4	7	15	19	26
Other renting	0	0	0	1	<1	0	1

[a] Government landholdings (e.g., CRP land, etc.) are not included in these percentages

Table C.8: Age cross-tabulated with financing methods, as a percentage of all farmland, 2002

Financing methods	<25	25-34	35-44	45-54	55-64	65-74	>75
				Percentage			
Free and clear	<1	1	4	9	16	21	23
Under contract	0	0	<1	<1	<1	<1	0
Through mortgage	<1	2	4	6	7	3	2
				Totals			
	1	3	8	15	23	24	25

Table C.9: Age cross-tabulated with the highest educational level obtained, as a percentage of all farmland, 2002

Education	<25	25-34	35-44	45-54	55-64	65-74	>75
				Percentage			
Graduate work	0	<1	<1	2	3	1	<1
Bachelor's degree	0	1	3	4	4	4	2
Some college	<1	1	3	5	7	6	5
High school graduate	0	1	4	5	9	11	13
Did not complete high school	0	<1	<1	<1	1	2	4

Table C.10: Age cross-tabulated with gender as a percentage of all farmland, 1982, 1992, 2002

Gender	<25	25-34	35-44	45-54	55-64	65-74	>75
1982				**Percentage**			
Male	1	6	8	13	11	8	6
Female	1	4	6	10	11	9	6
1992							
Male	1	3	6	11	12	11	8
Female	0	3	5	8	9	13	11
2002							
Male	<1	2	6	9	12	12	10
Female	0	1	3	7	11	11	14

Table C.11: Land acquisition methods, as a percentage of all farmland for all landowners, 2002 regional data

Acquisition method	State	NW	SW	N	NC	S	NE	E
				Percentage				
Purchased	72	64	67	65	60	87	82	71
Inherited	25	34	30	35	34	10	13	26
Gift	<1	2	3	<1	6	2	5	3

Table C.12: Age cross-tabulated with anticipated transfer method, as a percentage of all farmland, 2002

Transfer method	<25	25-34	35-44	45-54	55-64	65-74	>75
				Percentage			
Will to family	<1	1	4	7	9	10	11
Will to other	0	0	<1	<1	<1	1	1
Give to family	<1	1	2	2	2	3	2
Give to other	0	0	<1	<1	<1	<1	<1
Sell to family	0	<1	2	3	3	3	2
Sell to other	0	<1	1	2	3	2	1
Put in trust	<1	<1	2	3	3	4	2
Other/don't know	<1	<1	<1	1	2	2	2

Table C.13: Age cross-tabulated with the various conservation programs as a percent of owners, 2002

Conservation program	<25	25-34	35-44	45-54	55-64	65-74	>75
				Percentage			
Gov't conservation programs (CRP, WRP, EQIP, etc.)	0	1	10	19	28	23	19

Table C.13A: Age cross-tabulated with the various conservation programs as a percent of land, 2002

Conservation program	<25	25-34	35-44	45-54	55-64	65-74	>75
	Percentage						
Gov't conservation programs (CRP, WRP, EQIP, etc.)	0	1	10	20	26	22	20

Table C.14: Percentage of farmland owned by ownership type cross-tabulated with Iowa residency, 2002

Ownership type	All owners	Resident owners	Nonresident owners
		Percentage	
Sole owners	28	29	27
Husband and wife	38	44	8
Other joint/co-owners	12	11	17
Partnerships	2	1	8
Estates	4	4	3
Trusts	8	6	18
Corporations	7	5	17
Limited liability company	1	1	1

Appendix D:

Coefficients of Variation

Table D.1: Coefficients of variation in percent for each ownership type, statewide data, 1982, 1992, 2002

Ownership type	1982	1992	2002
Sole owners	7	8	6
Joint tenants	8	7	5
Other co-owners	18	14	11
Partnerships	45	26	28
Estates	20	24	19
Trusts	47	19	14
Corporations	8	8	15
Limited liability company	n/a	n/a	45

Table D.2: Coefficients of variation in percent for each ownership type, 2002 regional data

Ownership type	NW	SW	N	NC	S	NE	E
Sole owner	18	18	21	16	18	15	15
Joint tenants	19	18	21	16	11	11	10
Other co-owners	31	34	29	34	32	32	21
Partnerships	--	70	57	--	70	70	71
Estates	49	40	--	40	70	44	57
Trusts	36	28	36	32	44	70	32
Corporations	49	44	57	29	34	49	34
Limited liability company	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Table D.3: Coefficients of variation in percent for tenure of land ownership, 1982, 1992, 2002 as a percentage of farmland, all landowners

Tenure	1982	1992	2002
Owner operated[a]	42	43	3
Cash rent	9	10	4
Crop share	9	10	8
Other renting	35	39	41

[a] Owner operated includes both operated solely and/or with help

Table D.4: Coefficients of variation in percent for percentage of all farmland owned by tenure, 2002 regional data

Ownership type	NW	SW	N	NC	S	NE	E
Owner operated[a]	17	15	26	17	12	14	11
Cash rent	18	23	17	14	17	13	11
Crop share	37	19	23	18	29	31	20
Other renting	60	107	105	87	87	76	n/a

[a] Owner operated includes operating both solely and/or with help

Table D.5: Coefficients of variation in percent for percentage of all farmland managed by a professional farm manager, 1982, 1992, 2002

Tenure	1982	1992	2002
Professional farm manager	24	29	5

Table D.6: Coefficients of variation in percent for percentage of all farmland by financing method, all owners, 2002 regional data

Financing method	State	NW	SW	N	NC	S	NE	E
Debt free	2	13	12	15	10	12	10	9
Under contract	15	47	49	70	41	28	37	25
Through mortgage	7	23	20	22	26	15	21	16

Table D.7: Coefficients of variation in percent for all farmland held in various sizes of owned acreage by all owners, 1982, 1992, 2002

Size (acres)	1982	1992	2002
<80	10	13	10
81-240	5	5	5
241-600	5	5	5
>600	12	10	9

Table D.8: Coefficients of variation in percent for farmland by age of farmland owners in stages of the life cycle, 1982, 1992, 2002

Age group	1982	1992	2002
<25 years	56	80	71
25-34	18	24	22
35-44	13	15	12
45-54	10	11	9
55-64	9	9	7
65-74	12	10	7
>74	13	10	7

Table D.9: Coefficients of variation in percent of farmland owned by age cross-tabulated with size of owned acreages, 2002

Size (acres)	<34	35-64	>65
0-99	35	14	14
100-279	42	8	7
280-519	31	10	9
>519	55	10	13