



# Rented Land in Iowa: Social and Environmental Dimensions

## Introduction

More than half of Iowa farmland is rented. Decisions regarding who has access to that land and how it is farmed can influence the social and environmental outcomes of family farming. Farmland owners ultimately are responsible for decisions about who farms their land and how they farm it. Those decisions can have a major influence on farm operators' ability to earn a living through farming, and whether the land is stewarded or exploited.

Access to land, whether established through ownership or leasing arrangements, is critical to success in farming. In sectors such as manufacturing, the raw materials used in production processes can be sourced from across the globe, and different materials often can be substituted for one another in times of relative scarcity. In agriculture, there is a finite amount of farmland available in a given area; if farmers do not

have access to sufficient land within a certain distance of their homes, they cannot farm. Therefore, secure tenure over enough acreage to make a living or at least contribute to household income is key to success in farming.

Ownership can also play a major role in determining the environmental impact of farming. Research has consistently shown that the implementation of conservation practices—especially those that require major changes to the land and have longer-term benefit horizons such as terraces and riparian buffers—is positively related to ownership. Because such a high proportion of Iowa farmland is rented, it is important that we develop a better understanding of how non-operator landownership might affect the environmental performance of agricultural activities on that land.

Given that a majority of Iowa farmland is rented, surprisingly little research has exam-

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ined issues related to farmland ownership. This report begins to address that gap by presenting the results of recent research on rented land in Iowa, and provides recommendations for extension and outreach activities to help ensure that any effects of non-operator landownership are either neutral or beneficial to farm operators, farmland owners, rural communities, and the land itself.

## Methods

This report begins with a brief examination of data from the Census of Agriculture (1987 through 2007) to establish several important facts about the geographic and social distribution of rented land in Iowa. The main section of the report draws on data from the 2008 Iowa Farm and Rural Life Poll to examine farm operator-landlord relations, farmers' perspectives on their landlords' conservation ethics, and decision-making responsibility regarding conservation.

Established in 1982, the Iowa Farm and Rural Life Poll is conducted through a partnership between Iowa State University Extension, the Iowa Agriculture and Home Economics Experiment Station, and the Iowa Department of Agriculture and Land Stewardship. Generally known simply as "The Farm Poll," this annual survey collects and disseminates information on issues of importance to rural communities across Iowa and the Midwest. The Farm Poll serves to inform the development and improvement of Extension and research programs and is used by local, state, and national leaders in their decision-making processes. We thank the many farm families who responded to the 2008 survey and appreciate their continued participation in the Farm Poll. The 2008 survey was sent to 2,201 farmers. Fifty-eight percent of the sample completed the survey, resulting in a sample of 1,262 farm operators.

## Distribution of Rented Land in Iowa

The percentage of Iowa farmland that is rented has remained relatively stable over the last decades. Both USDA statistics and ISU Extension estimates indicate that since 1987, the percentage of rented farmland has fluctuated between 50 and 55 percent. The distribution of rented land is uneven, however. This section examines the distribution of rented land by key geographic, economic, and demographic variables.

### *Geographic distribution*

As the map in figure 1 indicates, the counties with the highest proportions of rented land tend to be located in the north-central (the Des Moines Lobe landform) and northwest (the Northwest Plains landform) parts of the state, areas that contain some of Iowa's most fertile agricultural lands. In the darkest shaded counties, rented land constitutes between 61 and 70 percent of all farmland. Conversely, in many of Iowa's southern counties, where land is less suited for row crops, less than one-third of farmland is rented. Thus, rented land is highly concentrated in the areas that contain the most fertile and productive farmland in the state.

While the overall percentage of rented land in Iowa has remained relatively stable, growth and decline in that percentage has not been uniform across the state. Since 1987, numerous counties—mostly in the southern half of the state—have experienced a decline in percentage of rented farmland (figure 2). On the other hand, approximately half of Iowa counties—mostly in the more fertile regions of the state—have seen an increase in rented farmland over the last two decades. A comparison of figures one and two reveals that many of the counties that have experienced an increase in percentage of rented land are also the counties that had the highest rates of non-operator farmland ownership in 2007.



## Economic distribution

Iowa land rental rates have risen precipitously in recent years, with ISU Extension estimates of the state-wide average cash rental rate for row crop land reaching \$185 per acre in 2009. High rental rates simultaneously represent a boon to landowners and a challenge for farmers who rely on rental land as part of their operations. While there are numerous issues associated with rental rates that merit discussion, our focus here is the flow of land rents: how much money is paid in land rent, and where does it go?

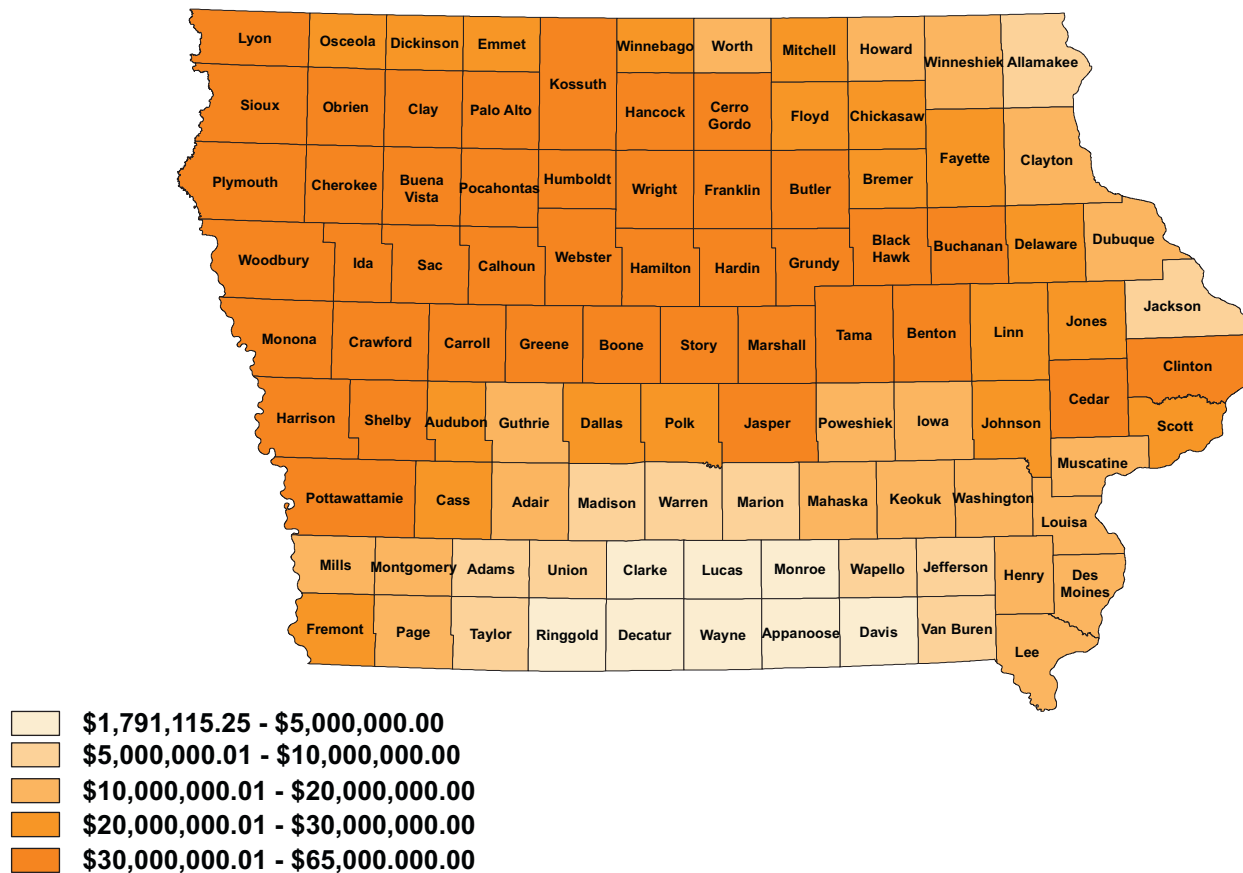
By combining landlord location data from the Farm Poll, ISU's annual cash rental rate estimates, and USDA statistics on percentage of cropland that is rented, we can estimate the amount of money from cropland rent that flows across and out of Iowa on an annual basis. If we

multiply the average county cash rental rate by the number of rented cropland acres in a given county, the result is a rough estimate of the total amount of land rent paid annually. These estimates do not include rent paid for pasture or hayland.

The results are striking. County totals range from a low of \$1.8 million for Lucas County to a high of \$63.6 million for Kossuth County (figure 3). If we sum the county totals from across the state, we find that approximately \$2.5 billion dollars were paid on 13 million cropland acres in 2009.

Using Farm Poll data on landlord location, it is possible to calculate a rough estimate of how much land rent stays in local counties, and how much flows to other counties or out of state. Fifty-four percent of landlords live in the county where their land is located, and an ad-

**Figure 3. Estimated land rents paid, 2009**



ditional 12 percent live in an adjacent county. Thus, the remaining 34 percent live outside of the immediate four- to eight-county clusters that surround their land, either out of state or “elsewhere in Iowa.” That proportion translates into a rough estimate of \$850 million of rent money that left the immediate area in 2009 (figure 4).

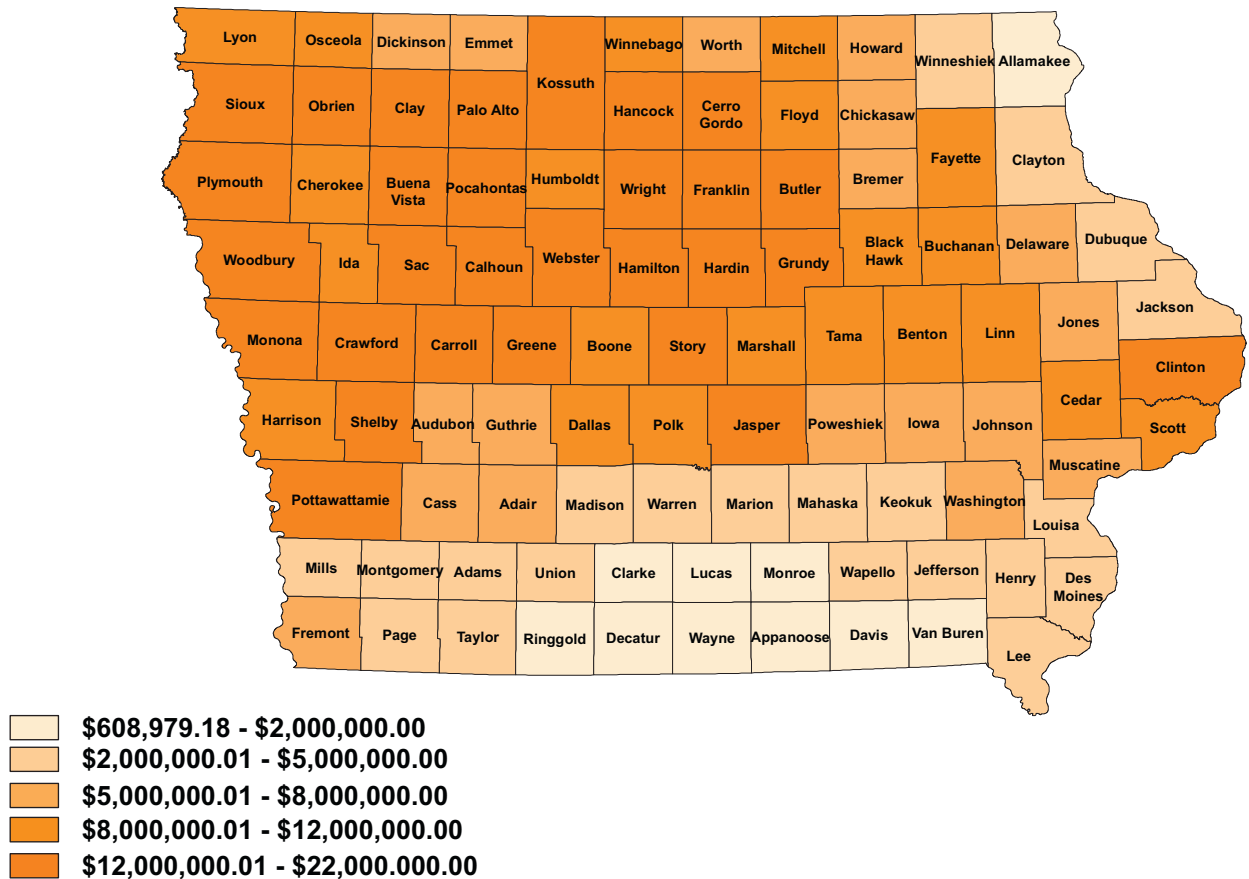
If we focus only on the 21 percent of landlords who live out of state, we estimate that \$523 million of land rents left the state in 2009. Because rented land is not distributed evenly across the state, the proportion of the money leaving counties will vary by amount of land rented (and quality of land for crops). If we assume that the 21 percent out-of-state landownership ratio will hold at the county level, we find that the amount of money leaving the state from individual counties varies greatly, from \$376,000 for Lucas County to \$13.4 million

for Kossuth County (figure 5). The distribution of dollars leaving the state is very similar to the figure for percentage of rented land above. Counties in north-central and northwest Iowa have much higher levels of money flowing out than do counties in the less fertile areas of the state. It must be noted that since these calculations were done only for cropland, those counties with less cropland and more pasture would naturally have less outflow of cropland rents.

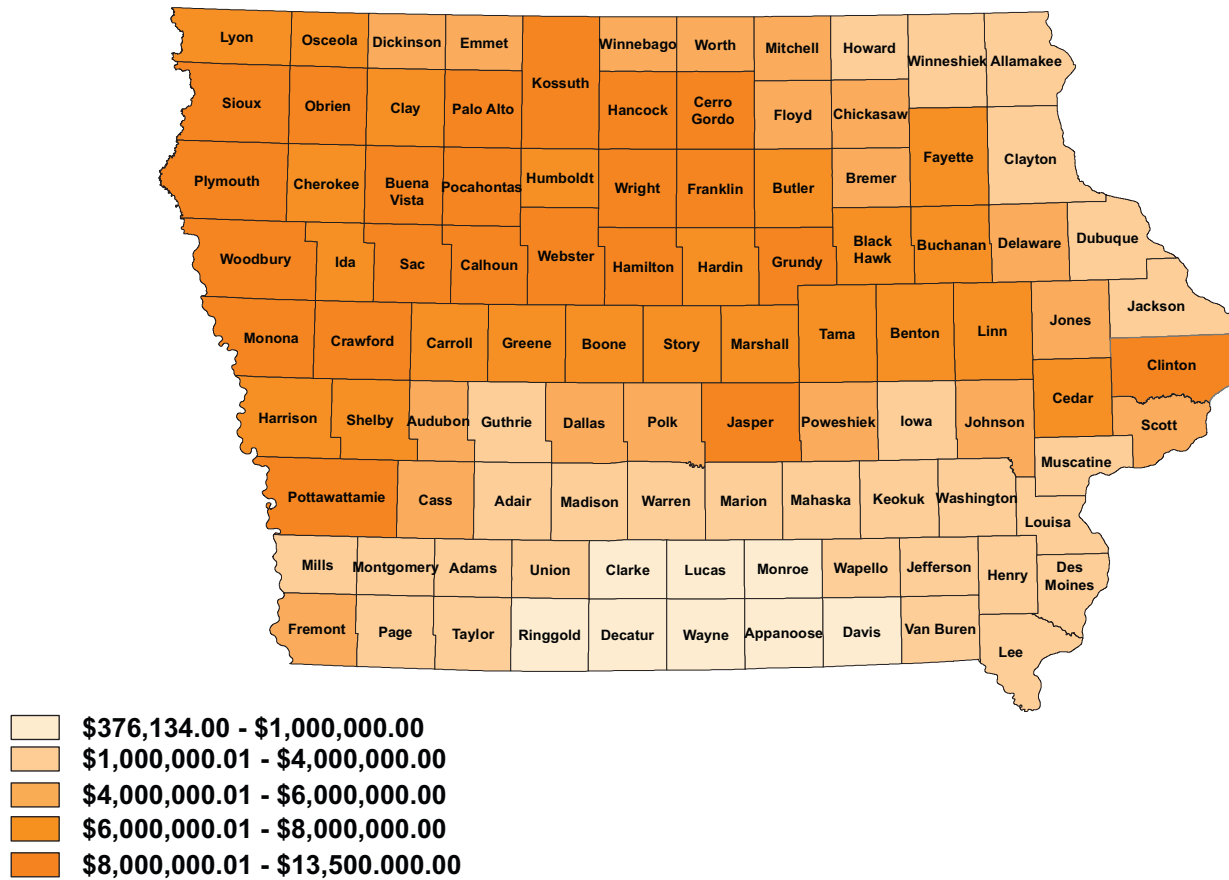
### ***Distribution by age***

It is also important to consider how rented land is distributed from a social standpoint. While there are numerous ways that the social implications of rented land can be approached, one of the most critical relates to access to farmland among less-established and beginning farmers.

**Figure 4. Estimated land rents leaving area, 2009**



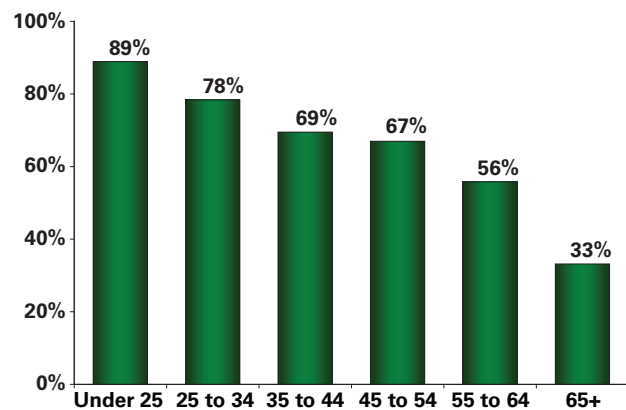
**Figure 5. Estimated land rents flowing to other states, 2009**



The USDA defines a beginning farmer as one who has operated a farm or ranch for less than 10 years. That definition includes farmers who begin farming in retirement or start farming on the side later in life. While farmers in those categories are important, for the purposes of this report, operator age is used as the measure of newness to farming.

Analysis by age group shows that younger farmers tend to be much more reliant on rented land than their older counterparts. Among farmers who cite agriculture as their *primary occupation*, those under the age of 25 rent 89 percent of the land that they farm, those between the ages of 25 and 34 rent 78 percent, and those between 35 and 44 rent 69 percent. Taken together, these three age groups rent more than 70 percent of the land that they farm (figure 6).

**Figure 6. Dependence on rented land by age group, primary occupation farmers**



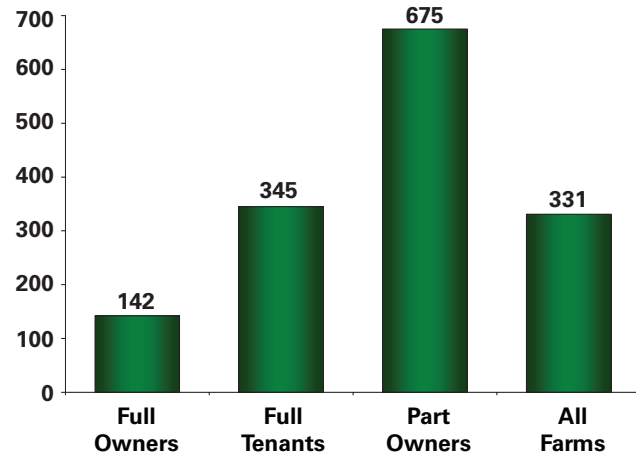
Source: 2007 Census of Agriculture.

Another way to look at dependence on rented land is to examine the prevalence of full tenancy. Full tenants are those farmers who rent all of the land that they farm. Overall, just 11 percent of Iowa's farmers are full tenants, 31 per-



cent rent some portion of the land they farm (part owners), and 58 percent own all of the land that they farm (full owners). Part owners have, on average, much larger farm operations than their full tenant and full owner counterparts. Part owners farm nearly twice as much land (675 acres) as full tenants (345 acres) and nearly five times as much as full owners (142 acres) (figure 7).

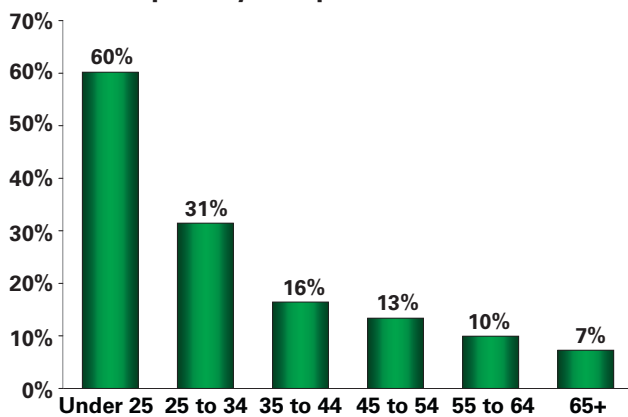
**Figure 7. Farm size in acres, by tenure category**



Source: 2007 Census of Agriculture.

Younger farmers, especially those who farm as their primary occupation, are much more likely to rent all of the land that they farm than older ones. Sixty percent of primary occupation farmers under 25 and 31 percent of those between 25 and 34 are full tenants, compared to 13 and 10 percent for their counterparts in the 45-54 and 55-64 age ranges (figure 8).

**Figure 8. Percent full tenants by age group, primary occupation farmers**

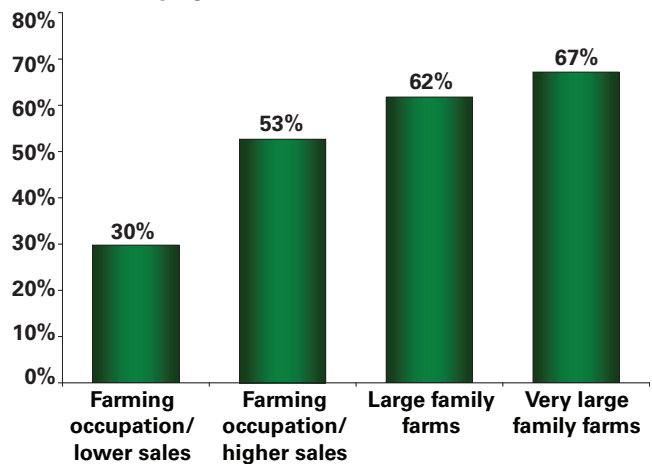


Source: 2007 Census of Agriculture.

## Distribution by farm size

Analysis of reliance on rented land by farm size indicates that on the whole, smaller farms are less reliant on leased land than larger farms (figure 9). Comparison by USDA farm typology categories shows that proportion of rented land increases with farm size. Farming occupation/lower sales farms, which the USDA defines as farms with sales of less than \$100,000 and a principal operator who reports farming as their primary occupation, rented 30 percent of the land they farmed in 2007. On the other end of the spectrum, very large family farms, which market \$500,000 or more of agricultural products annually, rented 67 percent of the land they farmed in 2007.

**Figure 9. Dependence on rented land by farm size**



Source: 2007 Census of Agriculture.

This brief examination of data from the 2007 Census of Agriculture demonstrates a crucial point: that rented land is not distributed evenly across the social and geographic landscape. From a social perspective, it is important to recognize that younger farmers tend to depend on rented land for their livelihoods to a greater extent than more established farmers. Geographic and economic distribution is also uneven. The correlation between proportion of farmland that is rented and the most fertile areas in Iowa is striking. This finding is not necessarily surprising, however. The land in

the counties where between 61 and 70 percent of the farmland is rented is some of the most fertile and valuable land in Iowa. On the whole it also has the greatest potential to generate substantial amounts of annual income, as evidenced by our estimates of annual rent paid. That income and investment value likely influences landowners—whether former farmers and their spouses, the non-farming heirs of farm estates, investors, or others—to hold on to the land rather than sell it to someone who would farm it. The critical point is that non-operator landownership in Iowa is concentrated in the most fertile areas, indicating that any social or environmental effects associated with rented land—whether positive, neutral, or negative—also will be concentrated in those areas.

## Tenant-Landlord Relationships: 2008 Iowa Farm and Rural Life Poll

Given the prevalence of rented land in Iowa agriculture, surprisingly little is known about the people who own that land and what impacts non-operator landownership might have on farmers, rural communities, and the environment. The 2008 Farm Poll included a number of questions that represent a starting point for research on non-operator landowners (NOLs) and the potential impacts of non-operator landownership. The primary research questions that guided the study focused on the relationships between distance from the land and connection to farming, and how variation in those characteristics might affect tenant-landlord relationships, levels of communication about farming practices and conservation, and land stewardship ethics. Unless otherwise indicated, all data cited in this section are drawn from the 2008 Iowa Farm and Rural Life Poll.

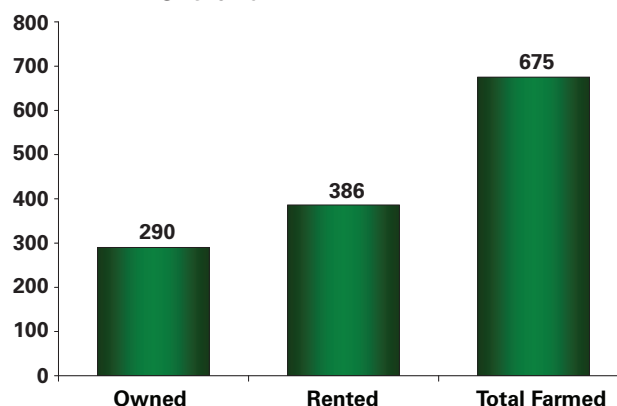
Distance is conceptualized in two distinct ways for this study. The first measure of distance is geographic. This measure is straightforward and defined as how close landlords live to their

land. The second measure of distance is defined in terms of landlords' cultural connection to farming. A landlord's cultural connection to farming—for the purposes of this report defined as experience with farming—is important because landlord expectations of tenants may be conditioned by their knowledge of farming. A landlord who has never farmed the land, or who has little or no hands-on experience with agriculture, may be less likely to understand the challenges and ups and downs of farming than landlords who have farmed. In addition, the degree to which landlords understand their land's conservation needs, for example erosion potential, may be influenced by their familiarity with the land itself.

### Tenancy among Farm Poll participants

Fifty-one percent of Farm Poll participants rented at least some farmland in 2007. On average, farmers who rented land owned 290 acres, rented 386 acres, and farmed a total of 675 acres (figure 10). Most farmers who rented land had more than one landlord. On average, Farm Poll participants rented land from three landlords. Thirty-six percent rented land from only one landlord, 22 percent from two, 17 percent from three, and the remaining 25 percent rented from four or more. The maximum number of landlords reported was 20. It is important to note that this research did not distinguish between different types of land lease. Cash leases and crop share leases are the two most common lease arrangements in Iowa.

**Figure 10. Acres owned and rented, farmers who rent land**





While the distinction between lease type can have important implications for distribution of decision-making responsibility and revenue, we did not collect data on this variable.

### ***Geographic and cultural distance from the land***

#### **Landlord place of residence/entity**

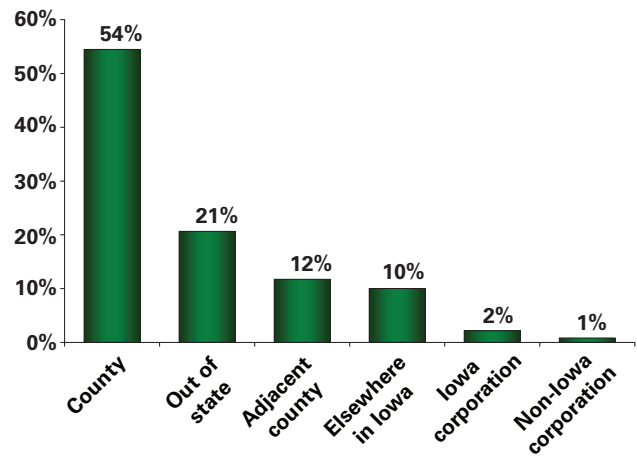
Farm Poll participants were asked where the landlords—up to four—from whom they rented the most land lived. If they rented land from a corporation, farmers were asked whether it was an Iowa-based corporation or one headquartered out of state. Respondents selected from six categories: 1) a person who lives in the county, 2) a person who lives in an adjacent county, 3) a person who lives somewhere else in Iowa, 4) a person who lives out of state, 5) an Iowa corporation, and 6) a corporation whose headquarters is outside of Iowa. In numerous cases, farmers reported that their landlords fell into more than one category for location or connection to farming, likely due to multiple owners of the same land. For these cases we report results for the closest landlords.

Fifty-four percent of the landlords were persons who lived in the county where the land is located. Another 12 percent lived in an adjacent county, and 10 percent lived elsewhere in Iowa. About 21 percent lived out of state. Small percentages of landlords were corporations: two percent were Iowa corporations, and one percent were corporations based outside of Iowa (figure 11).

#### **Landlord connection to farming**

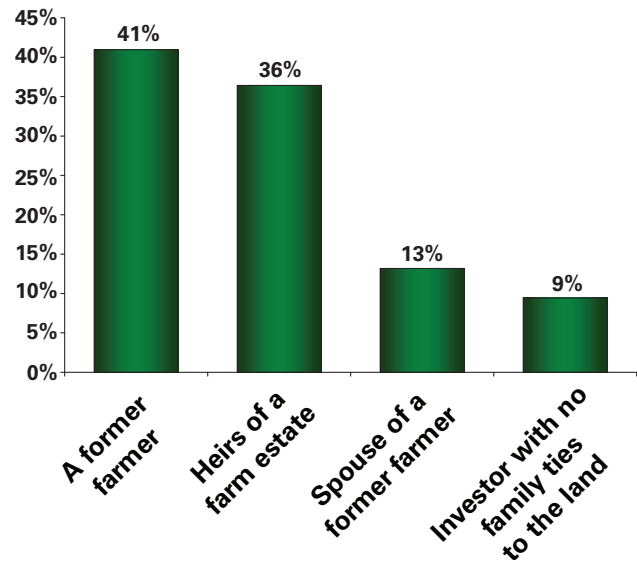
Farmers also were asked about their landlords' connection to farming and the land. Again, they were asked about the landlords (up to four) from whom they rent the most land. The categories from which they could choose were: 1) a former farmer, 2) the spouse of a former farmer, 3) the heir(s) of a farm estate, and 4) an individual investor with no direct family ties to the land. Former farmers were the most com-

**Figure 11. Where do landlords live?**



mon type of landlord, at 41 percent (figure 12). Following in prevalence were heirs of a farm estate (36 percent) and spouses of former farmers (13 percent). Investors with no family ties to the land made up 9 percent of landlords.

**Figure 12. Landlord connection to farming**



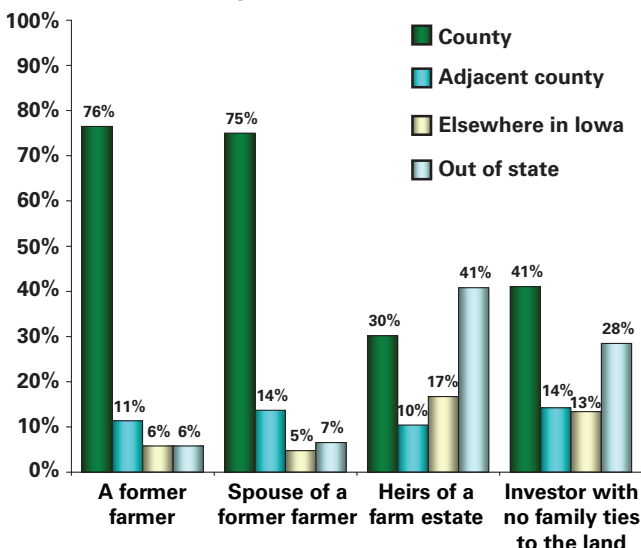
These results suggest that on the whole, landlord connection to farming remains fairly strong. Former farmers and spouses of former farmers made up 54 percent of landlords. If we assume that spouses of former farmers were involved in the farm operation to some degree, we can conclude that a majority of Iowa landlords do have a strong cultural connection to farming. With heirs of farm estates, the question of cultural connection to farming is less

clear. If we assume that heirs have a family connection to the land, then some 90 percent of landlords in Iowa have a family history of farming. We do not know, however, key details such as how many generations removed from farming they are. In addition, while we know that the investors in our sample do not have family ties to the rented land in question, they may have family farmland elsewhere.

### Landlord place of residence and connection to farming

Analyses show that landlord place of residence and connection to farming are related in important ways. Among the four landlords from whom operators rented the most land, former farmers and spouses of former farmers, at 76 and 75 percent, were much more likely to live in the county where their land is located than other types of landlords (figure 13). On the other hand, nearly 60 percent of heirs of farm estates lived either outside the state (41 percent) or elsewhere in Iowa (17 percent), with the remainder living in the county (30 percent) or in an adjacent county (10 percent). Investors with no family ties to the land tended to live closer than heirs, with 41 and 14 percent, respectively, living in the county or an adjacent county, 13 percent living elsewhere in Iowa, and 28 percent living out of state.

**Figure 13. Landlord residence and connection to farming**



These figures show that geographic distance between the land and its owners is much greater among heirs and investors than for former farmers and their spouses. The question remains, however, what this distance, both social and geographic, means in terms of practical outcomes for tenants, the land, and even the communities where the land is located. The following sections analyze a number of key social and environment-related variables by landlord location and connection to farming in order to identify any important differences between groups.

### Tenant-landlord relationships by geography, entity, and connection to farming

The stability of tenant-landlord relationships can have many implications for the social and environmental outcomes of farming. Competition for rental farmland can be fierce, and such competition can lead to uncertainty and stress among farm operators who depend on rented land to make ends meet. On the other hand, long-term commitments and frequent communication between the tenants and landlords may reduce uncertainty and stress. This section explores tenant-landlord relationships to assess their stability and levels of interaction.

On the whole, tenant-landlord relationships appear to be stable. The average length of time that farmers had been renting from the landlord from whom they rent the most land was 18 years, and 80 percent had rented from this primary landlord for more than five years. On average, tenants estimated that they communicate with landlords about farming practices eight times per year. However, 49 percent of tenants indicated that they communicate with their landlords about farming practices three or fewer times per year, and 11 percent had no communication with landlords about farming practices.

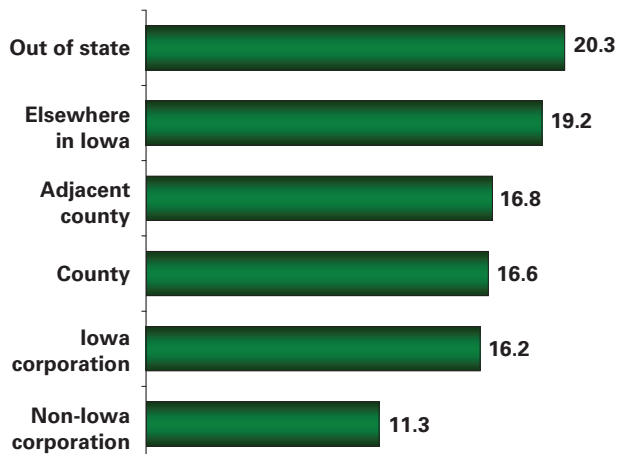
These data suggest that on the whole tenants and landlords are committed to their tenure relationships. Indeed, 78 percent of farmers

agreed or strongly agreed with the statement, “my landlord is committed to my continuation as a tenant.” Taken together with the data on length of tenancy and frequency of communication, the results point to strong tenant-landlord relationships that in many cases span decades. However, if we compare responses on these variables by landlord place of residence and connection to farming, a number of differences in tenant-landlord relations by geographic and cultural distance become apparent. Analysis from this point forward focuses on the landlord from whom the operators rent the most land.

### Length of relationships

In terms of geographic distance, results showed that the further a landlord lived from the land, the longer the tenure relationship. The longest average tenure terms—at slightly more than 20 years—were those with landlords who live out of state (figure 14). Rental relationships with landlords who lived elsewhere in Iowa averaged 19 years, and length of tenure with landlords who lived in-county or in an adjacent county was approximately 17 years. Length of tenure with Iowa corporations averaged 16 years, and the shortest relationships on average, at 11 years, were with non-Iowa corporations. Statistically significant differences were found between persons who lived outside the state and non-Iowa corporations ( $p < .01$ )

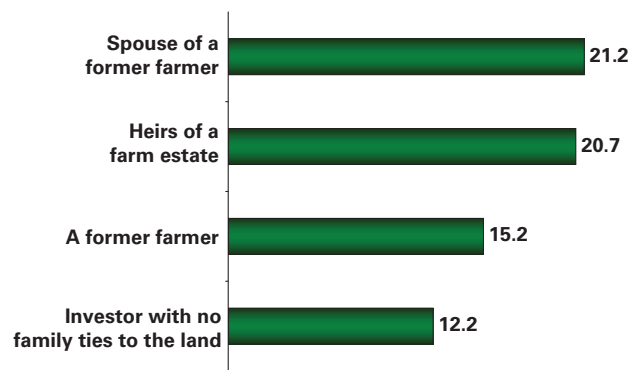
**Figure 14. Tenure length, by geographic distance**



and between persons who lived in-county and those who live outside of Iowa ( $p < .001$ ).

Viewed in terms of connection to farming, the longest relationships, at 21 years, were with spouses of former farmers and heirs of farm estates (figure 15). These were followed by former farmers (15 years) and investors with no family ties to the land (12 years). Statistically significant differences in length of relationship were found for all comparisons ( $p < .001$ ) except between spouses of former farmers and heirs and between former farmers and investors.

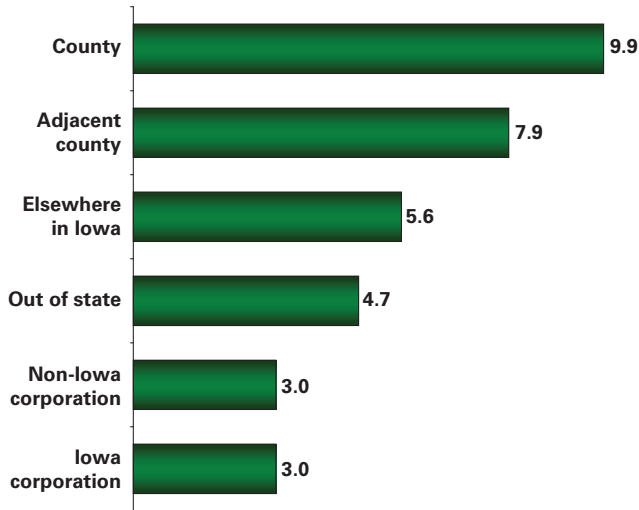
**Figure 15. Tenure length, by connection to farming**



### Communication about farming practices

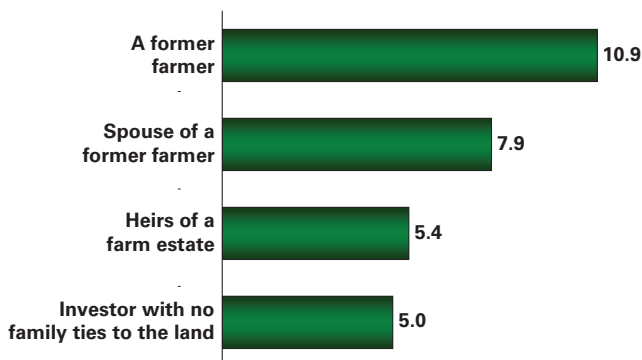
There was significant variation in levels of communication about farming practices by geographic distance and entity and connection to farming. Regarding location of landlord, persons who lived in-county communicated with their tenants an average of nearly 10 times per year (figure 16). Contact declined precipitously with distance; tenants averaged eight contacts with landlords who lived in adjacent counties, 5.6 with those who lived elsewhere in Iowa, 4.7 with those who lived outside the state, and three times for both Iowa and non-Iowa corporations. Significant differences were found between in-county landlords and several other groups: persons who lived elsewhere in Iowa ( $p < .01$ ), persons who lived outside the state ( $p < .001$ ), Iowa corporations ( $p < .001$ ), and non-Iowa corporations ( $p < .001$ ).

**Figure 16. Annual communication about farming practices, by geographic distance**



In terms of connection to farming, as might be expected, former farmers communicated with their tenants about farming practices most frequently, averaging 11 times per year (figure 17). Communication levels with spouses of former farmers were somewhat lower, with tenants communicating about eight times per year. Communication about farming practices dropped precipitously for heirs of farm estates and investors, to an average of about five times per year. Statistically significant differences in group averages were found between former farmers and heirs of farm estates ( $p < .001$ ) and investors with no family connection to the land ( $p < .001$ ).

**Figure 17. Annual communication about farming practices, by connection to farming**

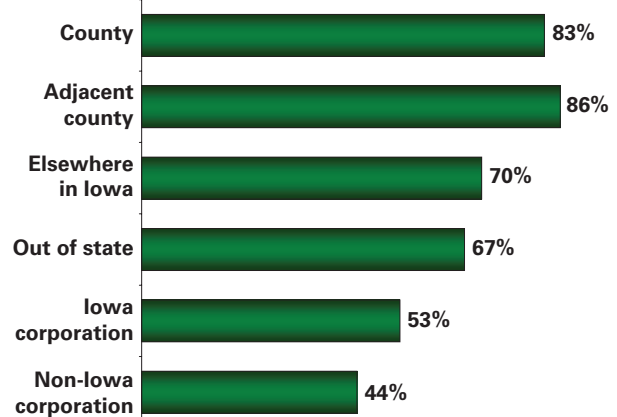


## Confidence in tenure relationships

A final relationship-related variable focused on tenant perceptions of their landlords' level of commitment to their relationships. As noted above, in response to the statement, "my landlord is committed to my continuation as tenant," 78 percent of farmers either agreed or strongly agreed, indicating generally high levels of confidence in those relationships. If we examine differences by geography, entity, and connection to farming, however, we find important differences in these perceptions.

In terms of geography and entity, tenants appeared to be much more confident in their relationships with landlords who lived close by than with those who lived far away. Confidence was highest regarding landlords who lived either in the county or in an adjacent county, with 83 and 86 percent of farmers, respectively, agreeing that their landlords were committed to continuation of their rental relationship (figure 18). That confidence faded quickly with distance: 70 percent of farmers whose landlords lived elsewhere in Iowa and 67 percent of those whose landlords lived out of state expressed the same levels of confidence. Confidence levels dropped even further among farmers whose landlords were Iowa and non-Iowa corporations: only 53 and 44 percent, respectively, agreed that their landlords were committed to their continuance as tenants.

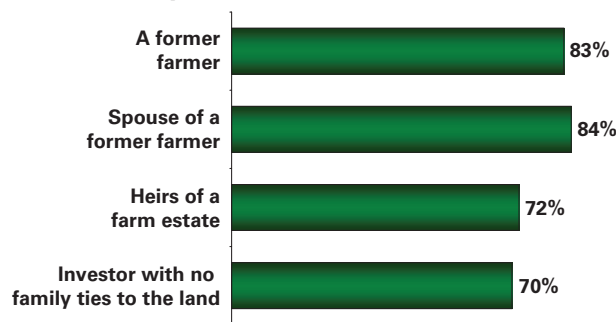
**Figure 18. Percent agreement by geography: My landlord is committed to my continuation as tenant**



Statistically significant differences were found between persons who lived in the county where the land was located and those who lived outside of Iowa ( $p < .01$ ), Iowa corporations ( $p < .01$ ), and non-Iowa corporations ( $p < .05$ ). Differences between adjacent county landlords and other categories included persons who lived outside of Iowa ( $p < .05$ ), Iowa corporations ( $p < .05$ ), and non-Iowa corporations ( $p < .05$ ).

Significant differences between groups were also found by connection to farming. While tenants whose landlords were former farmers or spouses of former farmers expressed relatively high levels of confidence in landlord commitment to their continuation as tenants (83 and 84 percent, respectively), rates of agreement were much lower for heirs of farm estates (72 percent) and investors (70 percent) (figure 19). Differences in rates of agreement were significant between former farmers and heirs ( $p < .05$ ), spouses of former farmers and heirs ( $p < .05$ ), and spouses of former farmers and investors ( $p < .05$ ).

**Figure 19. Percent agreement by connection to farming: My landlord is committed to my continuation as tenant**



On the whole, results suggest that tenant-landlord relationships are stable and committed. Tenants and their landlords communicate about farming multiple times over the course of a year, and they have leased land from the same landlords for many years, often measured in decades. Overall, tenants are confident that their landlords are committed to their continuation as renters.

The finding that these dimensions vary by geographic distance and connection to farming could be cause for concern, however. Results consistently point to a correlation between distance—both geographic and cultural—and deterioration of tenant-landlord relationships.

### **Rented land and land stewardship, by geography, entity, and connection to farming**

Research has suggested that non-operator landownership can complicate conservation decision making and lead to reductions in the overall environmental performance of farming on rented land. On the other hand, some recent research suggests that at least some portion of NOLs have strong land stewardship ethics, and social and environmental factors play significant roles in their motivations for landownership and decision-making processes. Therefore, a primary objective of the 2008 Farm Poll was to learn more about how tenants and landlords think about conservation on rented land. A series of questions regarding communication about conservation, conservation decision-making responsibility, and perceived landlord stewardship ethics were posed to the Farm Poll participants who rent land.

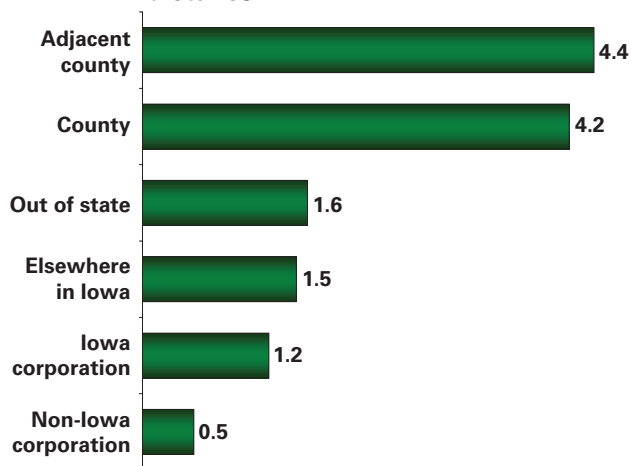
### **Communication about conservation**

Tenant-landlord contact about conservation was measured through the question, “how many times per year do you communicate with your landlord about conservation practices?” On the whole, communication about conservation was less frequent than communication about other farming practices. Tenants reported that they communicate with their primary landlords about conservation an average of three times per year. However, 29 percent indicated only one discussion about conservation and 28 percent reported that they did not speak with their landlord about conservation at all, meaning that two-thirds of tenants have very little communication about conservation issues with their landlords.



In terms of geography and entity, landlords who lived closer to their land communicated more frequently about conservation. Tenants whose landlords lived either in-county or in an adjacent county both averaged about four contacts per year (figure 20). As with communication about farming practices, number of contacts dropped off sharply with distance. Landlords who lived elsewhere in Iowa or outside the state communicated with tenants about conservation about 1.5 times per year. Iowa corporations and non-Iowa corporations had the least frequent communication about conservation, at 1.2 and 0.5 times per year, respectively. Significant differences were found between in-county landlords and persons who lived elsewhere in Iowa ( $p < .001$ ) and those who lived outside of Iowa ( $p < .001$ ).

**Figure 20. Annual communication about conservation practices, by geographic distance**



In terms of connection to farming, tenants reported higher rates of communication about conservation with spouses of former farmers than with any other group. Spouses of former farmers averaged 5.4 contacts about conservation per year, compared to 3.9 for former farmers (figure 21). Conservation communication was much lower with heirs of farm estates and investors, with whom tenants averaged about 2.2 contacts per year. A statistically significant difference in means was found between former farmers and heirs of farm estates ( $p < .05$ ) and

a marginal difference was detected between spouses of former farmers and heirs ( $p < .10$ ).

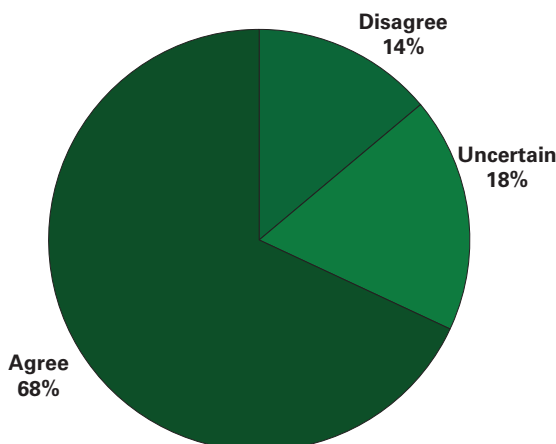
**Figure 21. Annual communication about conservation practices, by connection to farming**



### Responsibility for land stewardship

Farmers were asked their opinions regarding whom they believed should be responsible for addressing conservation needs on the land they rent. They were asked to rate their agreement or disagreement with the following statements: “if conservation practices are needed on the land I rent, it is my responsibility to address the need;” and, “if conservation practices are needed on the land I rent, it is my landlord’s responsibility to address the need.” For the former statement, a solid two-thirds majority either agreed (63 percent) or strongly agreed (5 percent) that it was their responsibility as tenants to take care of any conservation needs on the rented land they farm (figure 22).

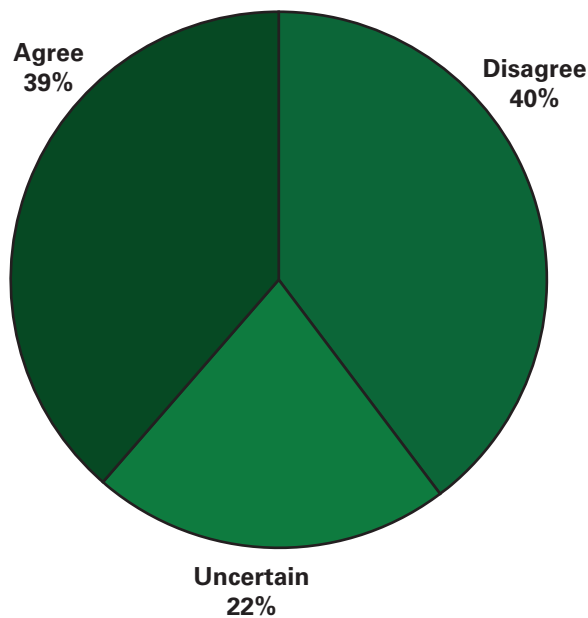
**Figure 22. Percent agreement: Tenant responsibility to address conservation needs on rented land**





On the other hand, over one-third agreed (36 percent) or strongly agreed (3 percent) that the responsibility for conservation behavior rested with the landlord (figure 23). Correlation analysis between the two variables showed a strong negative relationship (-.361,  $p < .001$ ), suggesting that the two positions are mutually exclusive to some degree, with most tenants placing the responsibility for ensuring sufficient conservation on themselves and a sizeable minority seeing landlords as responsible. No significant differences were found by geography, entity, or connection to farming for either variable.

**Figure 23. Percent agreement: Landlord responsibility to address conservation needs on rented land**



### Land stewardship ethics

A final question set asked farmers to rate their agreement or disagreement with a series of statements about landlords' conservation ethics and behaviors. Farmers were asked to rate their primary landlords on the following items: My landlord:

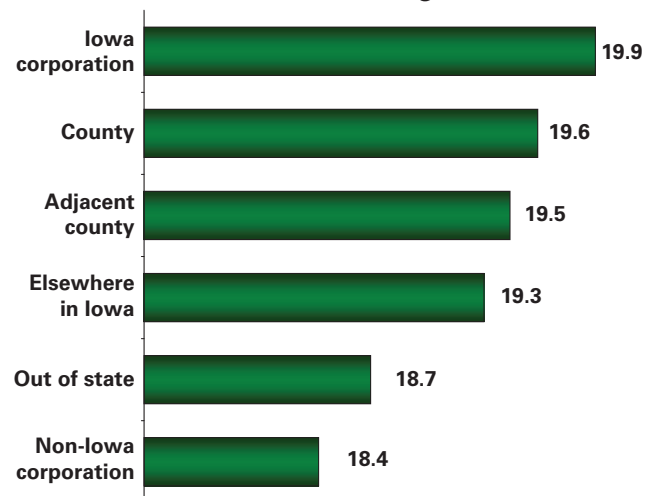
- places land stewardship goals ahead of income goals,
- cares about how my farming practices impact soil and water quality,

- is more interested in maintaining soil and water quality than maximizing profits,
- requires me to minimize impacts on soil and water quality,
- cares about wildlife habitat on his/her land, and
- participates substantially in conservation decisions.

These items were combined into a summative scale that can be viewed as an overall measure of perceived conservation values among landlords. Because all of the items were five-point scales, the minimum possible score for the index was five and the highest was 30. The average for the full sample was 19.4, which indicates that tenants generally believe that their landlords have fairly strong stewardship ethics.

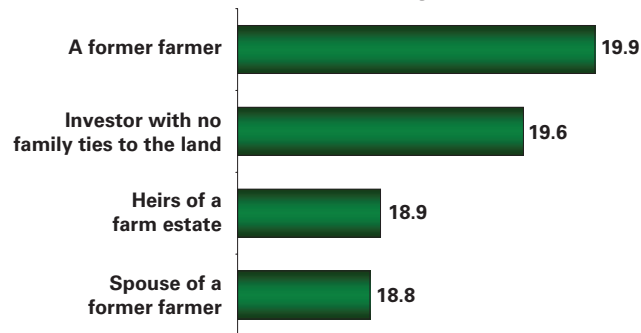
When examined by geography and type of landlord, results show that Iowa corporations were rated highest on the index, with 19.9 out of 30 (figure 24). They were followed by in-county landlords (19.6), adjacent-county landlords (19.5), persons who lived elsewhere in Iowa (19.3), persons who lived outside the state (18.7) and non-Iowa corporations (18.4). All of these scores were relatively close: the only statistically significant difference was detected between in-county landlords and out-of-state landlords ( $p < .05$ ).

**Figure 24. Conservation values scale scores, by connection to farming**



Comparison by connection to farming showed that former farmers, at 19.9, were rated highest on the scale, followed closely by investors with no family ties to the land, at 19.6 (figure 25). Heirs of a farm estate scored 18.9, followed by spouses of former farmers, at 18.8. Statistically significant differences were found between former farmers and spouses of former farmers ( $p < .05$ ) and between former farmers and heirs of farm estates ( $p < .01$ ).

**Figure 25. Conservation values scale scores, by connection to farming**



Similar to the results on stability of relationships, results overall were positive. Analysis of conservation-related data suggests that many landlords communicate with their tenants about conservation, most tenants place the onus for caring for rented land on themselves, and farmers believe that their landlords have a fairly strong conservation ethic. Again, however, most measures declined with geographic and cultural distance.

## Key Findings and Implications

This research represents one of the few in-depth, empirical efforts to examine the social and environmental implications of non-operator landownership in the Midwest. The findings regarding the distribution of rented land, the distribution of potential benefits and costs associated with that land, and landlords' relationships with both their tenants and the land they rent, all suggest that non-operator landownership merits more attention. In addition, the results point to areas of pressing research

and extension needs. The closing sections summarize key findings and outline important research and extension needs.

### ***Distribution of rented farmland is uneven***

*Rented farmland is concentrated in the most fertile areas of Iowa.* The counties in which between 60 and 70 percent of farmland is rented are in general the counties where farmland rents and land values are the highest. In addition, many of the counties with the highest percentages of rented land also are experiencing increases in prevalence of rented land. It is likely that the income and investment potential of the land in these areas leads retiring farmers, heirs of farm estates, and investors to hold onto the land and rent it rather than sell it to someone who might farm it. If that is the case, it is probable that the percentage of farmland owned by non-farmers in these areas will continue to increase.

*Beginning farmers are more reliant on rented land.* Beginning farmers depend on rented land to a much greater extent than do more established farmers, and a disproportionate percentage of young farmers rent all of the land that they farm. Taken together with the findings that 1) younger farmers have smaller operations on average and 2) larger-scale farm operations depend more heavily on rented land in their operations, the evidence points to possible competition for rented land between young farmers and better-capitalized, larger scale farm operations. Where there is fierce competition for rental land, smaller-scale, less-established farmers may lose opportunities to rent land to better-capitalized, larger-scale farmers who are able to pay higher rental rates.

*Economic benefits of rented land do not necessarily accrue locally.* Each year farmers pay an enormous sum of money in land rent. Much of this money, however, leaves counties, many of which have experienced decades of economic stagnation and population loss. Instead, it

flows to the nearly fifty percent of landlords who live elsewhere in Iowa or out of state. It is important to note, however that these estimates are rough. They do not take into consideration, for example, the local property taxes that NOLs contribute to local government revenues. They also do not account for potential in-flows associated with landlords visiting their land, spending on equipment and materials at local businesses, or other expenditures. Another potential weakness in the estimates is that they do not account for crop-share leases in which landowners share in the expenses of farming their land and therefore spend money locally on inputs. In addition, it is possible that some residents of the counties that experience large outflows of rental payments own land in other parts of the state or in other states, resulting in income flows into these counties.

Despite the potential shortcomings of these estimates, they serve to remind us that we should consider what such large economic outflows might mean for rural communities across Iowa. It is important to recognize that dollars that leave are dollars that do not turn over in local economies. Many of the counties that are sending the most money out of the area and state are also counties that have experienced persistent population loss and depressed economies over a long period of time. Annual outflows of upwards of \$10 million might be felt more keenly in such counties.

### ***Distance matters***

***Landlord-tenant relationships are stable, but deteriorate with distance.*** In general, tenants and landlords are in long-term tenure relationships, and appear to be committed to maintaining them going forward. Importantly, tenants are confident that their landlords are committed to their continuation as renters. However, the results of this study show that landowners who live further away from the land or who have less of a connection to farming are consistently less involved in decision making and perceived commitment to tenure relationships.

***Landlord stewardship ethics are strong, but decline with distance.*** Results indicate that tenants tend to see themselves as responsible for ensuring that conservation measures on rented land are adequate. For the most part they also perceive that their landlords are committed to land stewardship. However, tenants tend to view landlords who are further removed from farming as less focused on land stewardship. Communication about conservation was less frequent with landlords who lived away from the land or who were heirs of farm estates rather than former farmers. Perceived landowner conservation ethics also were seen to decline with geographic and cultural distance. At the same time, a significant percentage of tenants believe that their landlords are responsible for addressing conservation needs. If landlords who are more removed from the land are less involved in its stewardship, while at the same time their tenants are relying on them to take the initiative on conservation issues, environmental outcomes could be less than optimal.

***Absentee landownership is likely to increase.*** Our results show that former farmers and spouses of former farmers, who currently comprise the majority of landlords, tend to live in the county where their land is located. Heirs of farm estates, on the other hand, tend to live out of state or elsewhere in Iowa. As the current generation of former farmers and spouses of former farmers pass their farmland on to their heirs and we pass through successive waves of intergenerational transfer of farmland, the geographic and cultural distance between NOLs and their land will almost certainly increase substantially.

Taken together, the results of this study point to a need for action. Nearly half of Iowa NOLs live outside of the county where their land is located, and that percentage will increase. Landlord involvement with farming and conservation decisions, commitment to relationships with tenants, and perceived land stewardship ethics all decline with geographic and

cultural distance. As that distance grows over time, any negative impacts associated with that distancing also will likely intensify.

## Research Needs

**Identification of social and environmental impacts of rented land.** Research is urgently needed to systematically examine the impacts that rented land may have on rural Iowa's farmers, communities, and environment. While it is clear that rented land is unevenly distributed, both socially and geographically, the impacts of this disproportional distribution are not well understood. There is a pressing need for further research to quantify impacts and develop a better understanding of where and to whom both the costs and benefits of rented land are accruing. For example, does the annual flow of rent money out of local counties hurt local communities, or is it off-set by return flows of investment in land, conservation, or other activities? Are younger farmers at a disadvantage relative to more established farmers in the struggle to secure sufficient rental land, or does the prevalence of rented land provide more opportunities for young people to enter farming? Are tenants' perceptions that they are responsible for conservation and that their landlords have strong conservation ethics translating into adequate conservation behavior on the land that they rent? Answers to these and related questions are needed to help guide policy and programs focused on non-operator landownership.

**Develop knowledge of non-operator landowners.** A second critical focal point of research is the non-operator landowner. Despite the fact that this group owns more than half of Iowa's agricultural land, very little is known about them. It is imperative that we develop a better understanding of non-operator landowners in order to design outreach programs for them. Key questions include knowledge about farming and conservation, landownership motivations (i.e., financial, community attachment, recreation), connections to local com-

munities, preferred information channels and learning styles, stewardship ethics, and level of involvement in the management of their land. A better understanding of who non-operator landowners are is needed to inform the design and implementation of extension and outreach programs for this large group of landowners.

## Potential Extension Approaches

**Incorporate social and environmental criteria into leasing arrangements.** A potentially effective strategy for reaching both NOLs and their tenants is to target the leasing process. Leases are the nexus between the landowner and tenant, and a logical point at which both social and environmental considerations can be negotiated. Currently, however, leases generally focus on economic variables and can lack explicit social and environmental dimensions.

Research suggests that at least some portion of NOLs have strong land stewardship ethics. In addition to financial considerations, social and environmental factors play significant roles in their motivations for landownership and decision-making processes. If community attachment and environmental motivations underpin non-operator landowners' reasons for owning land, then a strong case can be made for developing mechanisms and strategies that help them to better control how use of their land affects the communities and environments where the land is located. Leasing arrangements or other mechanisms that explicitly incorporate environmental and social criteria into decision-making processes could help NOLs to ensure that activities on their land result in neutral or positive social and environmental outcomes. Such mechanisms could be especially valuable for NOLs who live far from their land and are unable to oversee daily management.

**Promote social and environmental responsibility among non-operator landowners.** For those landowners who do not have a strong social

and environmental commitment associated with landownership, approaches that attempt to incorporate such considerations into leases would have to be supported by outreach activities. Extension materials and programming could be developed to help NOLs to understand that while landownership confers rights, it also entails social and environmental responsibilities. Those responsibilities include commitments to fair relationships with current or potential tenants, to land stewardship, to the communities where the land is located, and to communities downstream. Landowners, especially those who are more removed—both physically and culturally—from the land and farming, need to know how to ensure that adequate conservation practices are in place on their land, how to consider and help foster the next generation of farmers, or otherwise fulfill responsibilities of landownership.

*Help operators compete for rental land based on social and environmental criteria.* Increased consciousness of social and environmental issues among NOLs and use of leasing agreements that incorporate social and environmental stipulations could translate into important opportunities for farm operators. At present, many operators compete for rented land based solely on economic criteria, primarily cash rent per acre. If more landowners demand that operators meet broader social and environmental criteria in order to rent their land, operators will be able to compete for rented land on multiple dimensions: social, environmental, and

economic. Operators could then market their conservation farming skills and/or desirable social characteristics (i.e., beginning farmer, active in the community). Extension programming could help operators learn how to develop and market these aspects of themselves, thereby fostering competition that incorporates social and environmental factors in addition to economic criteria. Such efforts would encourage more holistic and sustainable partnerships between landowners and operators and could ultimately lead to better social, environmental, and economic outcomes on rented land.

## Conclusion

The need for research and extension strategies that target agriculture on rented land are numerous and pressing. The proportion of farmland that is rented is increasing in many Iowa counties. The distance between landlords, their tenants, and farming—both geographic and cultural—also will likely become greater as many of the former farmers and their spouses who make up the majority of the landowners today pass their land on to heirs. Despite the potential causes for concern that this report points to, there are few, if any, programs that center on non-operator landownership. The development of strategies specifically focused on maintaining or improving the environmental and social performance of agriculture on rented land should be a high priority for Extension, public agencies, and private organizations alike.



# Reference List

- Arbuckle, J., Corinne Valdivia, Andrew Raedeke, John Green, and J. Rikoon. 2009. "Non-operator landowner interest in agroforestry practices in two Missouri watersheds." *Agroforestry Systems* 75:73-82.
- Bregendahl, Corry, Carol R. Smith, Tanya Meyer-Dideriksen, Beth Grabau, and Cornelia Flora. 2007. *Women, Land, and Legacy: Results from the Listening Sessions*. Ames, IA: Iowa State University Extension.
- Carolan, Michael S. 2005. "Barriers to the Adoption of Sustainable Agriculture on Rented Land: An Examination of Contesting Social Fields." *Rural Sociology* 70:387-413.
- Clearfield, Frank and Barbara T. Osgood. 1986. *Sociological Aspects of the Adoption of Conservation Practices*. Soil Conservation Service, Washington, D.C.
- Constance, Douglas H., J. Sanford Rikoon, and Jian C. Ma. 1996. "Landlord Involvement in Environmental Decision-Making on Rented Missouri Cropland: Pesticide Use and Water Quality Issues." *Rural Sociology* 61:577-605.
- Duffy, Michael and Darnell Smith. 2008. *Farmland Ownership and Tenure in Iowa, 2007*. PM 1983. Ames, IA: Iowa State University Extension.
- Duffy, Michael and Darnell Smith. 2004. *Farmland Ownership and Tenure in Iowa 1982-2002: A Twenty-Year Perspective*. PM 1983. Ames, IA: Iowa State University Extension.
- Duffy, Michael, Darnell Smith, William Edwards, and Becky Johnson. 2008. *Survey of Iowa Leasing Practices, 2007*. PM 1811. Ames, IA: Iowa State University Extension.
- Edwards, William and Darnell Smith. 2009. *Cash Rental Rates for Iowa, 2009 Survey*. Economics 1-8. Ames, IA: Iowa State University Extension.
- Fraser, Evan D.G. 2004. "Land Tenure and Agricultural Management: Soil Conservation on Rented and Owned Fields in Southwest British Columbia." *Agriculture and Human Values* 21:73-79.
- Featherstone, Allen M. and Barry K. Goodwin. 1993. "Factors Influencing a Farmer's Decision to Invest in Long-term Conservation Improvements." *Land Economics* 69:67-81.
- Petrzela, Peggy, Tom Buman, and Jamie Ridgely. 2009. "Engaging absentee landowners in conservation practice decisions: A descriptive study of an understudied group." *Journal of Soil and Water Conservation* 64:94A-99A.
- Salamon, Sonya, Richard L. Farnsworth, Donald G. Bullock, and Raji Yusuf. 1997. "Family Factors Affecting Adoption of Sustainable Systems." *Journal of Soil and Water Conservation* 52:265-271.
- Soule, Meredith J., Abeyayehu Tegene, and Kieth D. Wiebe. 2000. "Land Tenure and the Adoption of Conservation Practices." *American Journal of Agricultural Economics* 82:993-1005.
- U.S. Department of Agriculture, National Agricultural Statistics Service. 2007 *Census of Agriculture*. Washington, D.C.: USDA, 2009.
- U.S. Department of Agriculture, National Agricultural Statistics Service. 1997 *Census of Agriculture*. Washington, D.C.: USDA, 1999.
- U.S. Department of Agriculture, National Agricultural Statistics Service. 1992 *Census of Agriculture*. Washington, D.C.: USDA, 1994.
- U.S. Department of Agriculture, National Agricultural Statistics Service. 1987 *Census of Agriculture*. Washington, D.C.: USDA, 1989.

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