

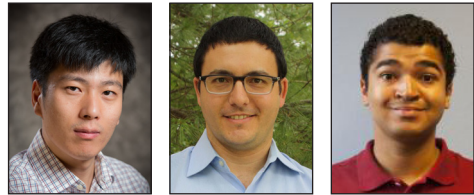


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Iowa farmland ownership and tenure survey 1982–2017: a thirty-five year perspective

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Farmland Ownership and Tenure in Iowa 1982–2017: A Thirty-Five Year Perspective carries out a mandate of the Iowa Legislature. This study focuses on forms of ownership, tenancy, and transfer of farmland in Iowa in 2017, as well as characteristics of landowners. The purpose of the study is to document the current situation with respect to Iowa farmland. In addition, this study compares and contrasts the current situation with that found in earlier studies since 1982.

The Iowa Farmland Ownership and Tenure survey started in the 1940s, and since 1989, it has been conducted every five years as mandated by Iowa Code. This survey series is the first of its kind in the nation and the only consistent information on the ownership, tenure, and transitions of farmland at the state level.

The 2017 survey is based on a random sample of 40-acre tracts

of farmland. Landowners of these tracts were interviewed via telephone with a response rate of over 60 percent. The sampling design means that the survey results presented in this study are statistically representative of all farmland and all landowners in Iowa as of July 1, 2017.

The 2017 survey was sponsored by the Iowa State University College of Agriculture and Life Sciences (CALs). With funding support from the Leopold Center for Sustainable Agriculture and the Iowa Nutrient Research Center, the 2017 survey added new questions on land tenure and conservation, as well as more details on land transfer and transitions. Additionally, the CoBank Fund for Excellence in Cooperative Economics sponsored a new section on the use of cooperative services on Iowa farmland.

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Handbook updates
 For those of you subscribing to the handbook, the following updates are included.

- Leasing and Land Ownership Terms – C2-05 (2 pages)
- Survey of Iowa Leasing Practices, 2017 – C2-15 (8 pages)
- Crop Share Leasing Provisions – C2-30 (3 pages)

Please add these files to your handbook and remove the out-of-date material.

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Most of the results in this report will be presented as a percentage of farmland in Iowa. The 2017 survey also allows the representation of the results as a percentage of landowners. Unless noted otherwise, the 2017 results will be presented in terms of percentage of land.

The 2017 survey revealed many policy-relevant trends in the ownership and tenancy of farmland as well as characteristics of farmland owners. Below are some of the highlights:

- Eighty-two percent of Iowa farmland is owned free of debt, which represents a significant increase from 62 percent in 1982 and 78 percent in 2012.
- Sixty percent of farmland is owned by people 65 years or older and 35 percent of farmland is owned by people 75 or older.
- Forty-seven percent of farmland is owned by women, 13 percent is owned by female landowners over 80.
- Fifty-three percent of farmland is leased, with the majority of farmland leases being cash rental arrangements (Table 1).
- Twenty-nine percent of Iowa farmland is primarily owned for family or sentimental reasons.
- There is a continuous shift away from sole ownership and joint tenancy to trusts and corporations, which accounted for 20 percent and 10 percent of land, respectively, in July 2017.
- Over half of Iowa farmland is owned by someone who does not currently farm, of which 34 percent is owned by owners with no farming experience, and the remaining 24 percent is owned by retired farmers.
- Eighty percent of land was owned by full-time Iowa residents, seven percent was owned by part-time residents, and 13 percent was owned by those who do not live in the state.

Five major trends in the ownership, tenure, and transfer of Iowa farmland are worth noting from the 2017 survey. The first major change is the continuation of aging farmland owners in Iowa. In 2017, over half the farmland (60 percent) in Iowa was owned by people over the age of 65. This was five percentage points higher than in 2007, and twice the level in 1982. In addition, farmland owners who were 75 years or older owned a record 35 percent

of all acres in Iowa as of July 2017. The aging farmland owner issue is not just unique to Iowa and not unique to landowners either. The U.S. Census of Agriculture has revealed aging farm operators, which is consistent with the aging workforce in non-agricultural sectors across the nation, too. However, the continuation of aging farmland owners does pose significant challenges for access to land, especially by beginning farmers.

A second major trend that had been observed is the increasing amount of land that is cash rented. Leased farmland was equally divided between cash rent and crop share leases in 1982. By 2017, 82 percent of leased farmland was under a cash rent arrangement. The use of flexible cash rent leases has also been on the rise. The trend away from crop share to cash rent agreements has two primary reasons. First, as landowners become more dispersed, payment in grain becomes much more of a burden, especially for those unfamiliar with agricultural markets. Second, there has been an increase in the number of landowners each tenant has today. The more landowners there are, the more burdensome it becomes to keep grain differentiated by owner. The low-to-negative margins in production in recent years may also play a role.

The third major trend relates to the financing of Iowa farmland. In 2017, 82 percent of Iowa farmland was owned debt free, which represents a significant increase from 62 percent in 1982 and 78 percent in 2012. This could be the result of profits earned during good crop years from 2012 to 2014 and

Table 1. Farmland tenure in Iowa as a percent of all acres, 2017

Percent of Iowa farmland as of July 2017		
Owner controlled:	47%	
Owner-operated		37%
Custom farmed		2%
Government programs and other uses		8%
Leased:	53%	
Cash rent (fixed)		35%
Cash rent (flexible)		9%
Crop share		9%
Other types of leases		<1%
Total:	100%	

Iowa farmland ownership and tenure survey 1982–2017: a thirty-five year perspective, continued from page 2

profitable livestock production years like 2014. Currently, U.S. farm income is half of its 2013 peak, and the Federal Reserve is continuing efforts to raise interest rates. The high percentage of land held debt free is a major factor for the relative stabilization of the farmland market but also a reason for limited land supply across the Midwest.

The fourth major trend is the increasing relevance of family or sentimental reasons for owning land. Farmland is owned for three primary reasons: (a) half of the land is owned for current income; (b) 19 percent is owned for long-term investment; and, (c) 29 percent is owned for family or sentimental reasons— an increase from 22 percent in 2012, and a change from 2007 when more people owned their land as a long-term investment versus for current income. This is concurrent with the increasing amount of land held by late-stage landowners and land owned debt free.

The fifth major trend is a continuing shift away from sole ownership and joint tenancy towards more institutionalized ownership structures such as trusts and corporations. In particular, trusts accounted for 20 percent of all acres in Iowa as of July 2017, while three decades ago almost no land was owned in that fashion. In contrast, the share of farmland owned by sole owners or joint tenancy declined from 80 percent of farmland in 1982 to only half in 2017. Most of the trusts were revocable trusts that last for one generation, which suggests that key motivations for the increasing use of trusts were estate planning, transition planning, and tax management.

All these trends have significant implications for when and how farmland is intended to be transferred to the next generation. Willing or giving the land to family remained the most popular method of intended land transfer, accounting for more than half of all acres of Iowa farmland. The second-most popular intended method of land transfer was putting it into a trust. Only seven percent of Iowa farmland was intended to be sold to a non-family member. The recent federal and state tax policy changes, especially the reinforcements of stepped-up basis for farmland transition and 1031 exchanges for farmland, likely will continue to make the farmland market tight with limited land sales.

The new section on land tenure and conservation reveals that about four percent of Iowa farmland is currently growing cover crops, and about 20 percent of farmland owners expressed willingness to pay a portion of planting costs to encourage more adoption of conservation practices on the land they own.

The new section on cooperatives reveals that approximately 30 percent of Iowa's land uses inputs purchased from a cooperative, markets products through a co-op, and uses custom services of agricultural cooperatives.

The agricultural economy in Iowa and the Midwest is arguably in a critical inflection point. On the one hand, commodity prices, farmland prices, and farm income started to show signs of stabilization or slight increases; on the other hand, the agricultural economy is facing growing downward pressure through rising interest rates and heightened uncertainty with several of our major trading partners. This study and previous versions of the Iowa Farmland Ownership and Tenure surveys provide a unique long-term perspective for us to better understand how trends in farmland ownership and tenancy responded and will respond to these macroeconomic changes, and the landowners' decisions on how to own, operate, and transfer their land will significantly shape the future of Iowa and Midwest agriculture.

For the full report, visit the Extension Store website, (<https://store.extension.iastate.edu/product/6492>).



The impact of climate change on midwest agriculture

By Don Hofstrand, retired extension value added agriculture specialist, agdm@iastate.edu

Climate change will impact Midwest agriculture. Strategies focused on adapting to climate change, along with long-term climate change mitigation efforts, will be crucial to maintaining productivity.

Corn and soybean yields increased markedly over the last century due largely to new technologies and improved production practices. However, continued improvements in technologies and practices will be important as the agriculture community is challenged by a changing climate.

Temperature variability in the Midwest is expected to increase. This includes higher day-to-day and year-to-year variability. Both summer and winter nighttime temperatures have risen more than daytime temperatures over the last 30 years. This trend is likely to continue. Increases in nighttime temperature in the Midwest during the grain filling period for corn is beginning to negatively impact grain weight due to increased nighttime respiration of the corn plant.

Most plant processes are accelerated under higher (except extreme) temperatures. Plants will grow faster and mature quicker. This change will apply to both crops and weeds. However, in the long-term, continued warming may increase temperature levels in excess of those needed for optimum plant growth.

Although it seems counter-intuitive, summer daytime maximum temperatures in Iowa have gone down in the last 30 years. Extended periods of 100 plus degree temperatures are rare, due partially to more precipitation and higher humidity levels.

However, while there may be more rain in the future, periods between rain events will unmask the increased warming that will occur, leading to increased daytime temperatures. The average daytime maximum temperature of future 5-day heat waves in the Midwest are projected to be 13 degrees higher than present by mid-century.

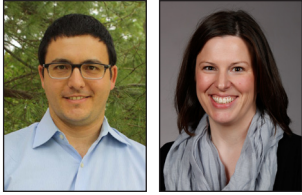
Higher warm season humidity leads to increased rainfall, extreme rain events, water-logged soils during planting season, soil erosion, and runoff of chemicals to waterways. Rising humidity also leads to longer dew periods and higher moisture conditions that elevate costs of drying grain and increase populations of many pests and pathogens harmful to both growing plants and stored grain. Increased nighttime temperatures, coupled with humidity, causes stress to crops and livestock.

Iowa's annual average precipitation, including growing season precipitation, has increased in recent decades. Precipitation is expected to increase by about ten percent in the future. Most of the increase will come from wetter springs, with drier or little change in summers. However, summer precipitation will become more variable with a higher probability of intense rain events, leading to the potential for increased flooding and soil erosion.

Because plants use carbon dioxide for photosynthesis, higher atmospheric carbon dioxide concentrations can stimulate plant growth (both crops and weeds) and increase water-use efficiency. However, due to a different photosynthesis process, some crops like corn do not respond as readily to higher carbon dioxide levels.

Although higher carbon dioxide levels may initially raise yields, the negative impacts of climate change are expected to more than offset carbon fertilization benefits in the long run. Also, higher carbon dioxide levels have been shown to reduce the nutritional value of crops such as wheat and soybeans.

In addition to addressing climate change on their own operations, Midwest farmers must also respond to market signals from climate change on world agricultural production. Greater yield volatility at the farm level, combined with increased crop price volatility due to changing world conditions, will increase the need for financial risk management strategies.



Farmland leasing meetings offer leasing arrangement information

By Alejandro Plastina, extension economist and assistant professor in economics, 515-294-6160, plastina@iastate.edu; Ann Johannis, extension program specialist, 641-732-5574, aholste@iastate.edu

Iowa State University Extension and Outreach will host multiple farmland leasing meetings during July and August at various times and locations throughout Iowa. The annual meetings are offered to address questions that land owners, tenants or other interested individuals have about leasing farmland.

Core components of the 2018 program will include a focus on farmland ownership and tenure in Iowa, the latest on the economics of cover crop research and discussion on implementing conservation practices in leases, land values and cash rent trends, cost of production, methods for determining a fair rental rate, the latest legal updates that impact farm leases and land ownership and communication between tenants or landlords. Additional topics vary by location.

The three-hour workshop is designed to assist landowners, farm tenants and other agri-business professionals with current issues related to farmland ownership, management and leasing arrangements. Attendees will gain a better understanding of current cash rental rate surveys and factors driving next year's rents such as market trends and input costs. Comments from past participants highlight the value of the materials provided and depth of information covered in the short program.

A 100-page workbook is compiled for the programs, with resources regarding land leasing agreements such as surveys, sample written lease agreements and termination forms, along with many other publications.

Attend a local leasing meeting

The leasing meetings being held across Iowa are facilitated by ISU Extension and Outreach farm management specialists. A listing of ISU Extension and Outreach county offices hosting meetings is available online with additional information available through the Ag Decision Maker website (www.extension.iastate.edu/agdm/info/meetings.html).

Farmland LEASING Meetings



For registration information, contact the local ISU Extension and Outreach county office (www.extension.iastate.edu/countyservices/). Pre-registration is encouraged as an additional \$5 fee may be added if registering less than two calendar days before the meeting date.

The Ag Decision Maker leasing section (www.extension.iastate.edu/agdm/wdleasing.html) also provides useful materials for negotiating leases, information on various types of leases, lease forms and newly updated Decision Tools (www.extension.iastate.edu/agdm/decisionaids.html).

Updates, continued from page 1

Internet Updates

The following Information File and Decision Tools have been updated on www.extension.iastate.edu/agdm.

Risk Management Practices for Small- to Medium- Size Swine Producers – B2-25 (2 pages)

Crop and Livestock Land Use Analyzer – C1-15 (Decision Tool)

Current Profitability

The following tools have been updated on www.extension.iastate.edu/agdm/info/outlook.html.

Corn Profitability – A1-85 (Decision Tool)

Soybean Profitability – A1-86 (Decision Tool)

Iowa Cash Corn and Soybean Prices – A2-11

Season Average Price Calculator – A2-15

Ethanol Profitability – D1-10

Biodiesel Profitability – D1-15

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