Iowa Farmland Ownership and Tenure Survey: Conservation

Wendong Zhang
Assistant Professor and Extension Economist
515-294-2536
wdzhang@iastate.edu

State of Iowa Soil Conservation Committee
A Quick Introduction: Dr. Wendong Zhang

– Grown up in a rural county in NE China
– Attended college in Shanghai and Hong Kong
– Ph.D. in Ag Econ in 2015 from Ohio State
– 2012 summer intern at USDA-ERS on farm economy and farmland values
– Research and extension interests: land value/ownership [www.card.iastate.edu/farmland/]
agriculture and the environment

China Ag center [www.card.iastate.edu/china]
• 82% of Iowa land is debt-free
• 60% of land owned by owners 65+ years old, one-third of land owned by 75+ years old, 13% of land owned by women landowner 80+ years old
• Ownership continues to shift from sole ownership to trusts and corporations
• 53% of Iowa land rented out – mainly cash rent
• 34% of Iowa land owned by landlords with no farming experience, 23% of land owned by retired farmers who do not currently farm
• 29% of Iowa land owned primarily for family/sentimental reasons

($5 each print copy!)
https://store.extension.iastate.edu/product/6492
The first and only consistent data collection of land ownership & tenure in the nation:

Statistically representative of all owners & all land in Iowa

Telephone survey

Widely used and best available information

Mandated by Iowa Code since 1989 to be conducted every 5 years

USDA data: AELOS 1999, TOTAL 2014
Percentage of Farmland by Age of Owner

- 1982: 75%
- 1992: 75%
- 2002: 75%
- 2007: 75%
- 2012: 75%
- 2017: 75%

- 75+:
- 65 - 74:
- 55 - 64:
- 45 - 54:
- 35 - 44:
- < 25:

IOWA STATE UNIVERSITY
Extension and Outreach
Ag Decision Maker
CARD Center for Agricultural and Rural Development
2017: 57% of land owned by owners who do not farm; of these, 34% land owned by owners with no farming experience and 23% by retired farmers
<table>
<thead>
<tr>
<th>Practice</th>
<th>Owners</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>No till</td>
<td>21%</td>
<td>27%</td>
</tr>
<tr>
<td>Cover crops</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Buffer strips</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Pond or sedimentation basin</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>Pay for a portion of cost to plant cover crops</td>
<td>Lower rent for tenants who plan to plant cover crops</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Yes</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>No</td>
<td>25%</td>
<td>7%</td>
</tr>
<tr>
<td>Maybe</td>
<td>16%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Conservation by Land Tenure

- Iowa farmland
  - 53% leased
  - 47% owner operated
2012 Ag Census: CRP Enrollment

Acres Enrolled in the Conservation Reserve, Wetlands Reserve, Farmable Wetlands, or Conservation Reserve Enhancement Programs as Percent of Land in Farms Acreage: 2012

Show State mask

Percent
Less than 1
1 - 2
3 - 5
6 - 8
9 - 11
12 or more

Click on map for county specific information
To pan, click and hold while moving pointer

NASS map ID: 12-M266
No-Till Use by CRD: State Average 27%
HEL & Part-Time farmer drives no-till

<table>
<thead>
<tr>
<th></th>
<th>No-till</th>
<th>Cover crops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operated – Full time farmer</td>
<td>29%</td>
<td>7%</td>
</tr>
<tr>
<td>Rented – Full time farmer</td>
<td>31%</td>
<td>3%</td>
</tr>
<tr>
<td>Operated – Part time farmer</td>
<td>13%</td>
<td>3%</td>
</tr>
<tr>
<td>Rented – Part time farmer</td>
<td>39%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Cover Crop Use by CRD: State Average 4%
# Livestock and Crop Inventory by Crop Reporting District

<table>
<thead>
<tr>
<th>District</th>
<th>Chickens, Layers</th>
<th>Hogs</th>
<th>Milk Cows</th>
<th>Cattle</th>
<th>Pasture</th>
<th>Timber</th>
<th>Corn</th>
<th>Soybean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest</td>
<td>30%</td>
<td>26%</td>
<td>29%</td>
<td>22%</td>
<td>7%</td>
<td>2%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>North Central</td>
<td>64%</td>
<td>16%</td>
<td>4%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Northeast</td>
<td>1%</td>
<td>12%</td>
<td>51%</td>
<td>16%</td>
<td>11%</td>
<td>23%</td>
<td>12%</td>
<td>8%</td>
</tr>
<tr>
<td>West Central</td>
<td>0%</td>
<td>13%</td>
<td>1%</td>
<td>13%</td>
<td>10%</td>
<td>7%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Central</td>
<td>3%</td>
<td>13%</td>
<td>1%</td>
<td>7%</td>
<td>8%</td>
<td>8%</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>East Central</td>
<td>1%</td>
<td>5%</td>
<td>10%</td>
<td>11%</td>
<td>11%</td>
<td>14%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Southwest</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
<td>9%</td>
<td>12%</td>
<td>5%</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>South Central</td>
<td>0%</td>
<td>2%</td>
<td>1%</td>
<td>9%</td>
<td>25%</td>
<td>19%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Southeast</td>
<td>1%</td>
<td>11%</td>
<td>3%</td>
<td>6%</td>
<td>12%</td>
<td>19%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Iowa Total</strong></td>
<td><strong>52.2 million</strong></td>
<td><strong>20.4 million</strong></td>
<td><strong>0.17 million</strong></td>
<td><strong>3.8 million</strong></td>
<td><strong>2.5 million</strong></td>
<td><strong>1.2 million</strong></td>
<td><strong>12.9 million</strong></td>
<td><strong>10.0 million</strong></td>
</tr>
</tbody>
</table>
Reasons for Not Using Conservation Practices

• No-till:
  1. Not suitable for land/soil (19%)
  2. Hurts crop yield (18%)

• Cover crops:
  1. High termination cost (21%)
  2. Too short of a season to plant them (19%)
Likelihood of Using Practices in Next Five Years

- **No-till**: 80% Yes, 10% Maybe, 10% No
- **Cover Crops**: 60% Yes, 20% Maybe, 20% No
- **Buffers**: 90% Yes, 10% Maybe
- **Ponds**: 100% Yes

---

**Iowa State University**
Extension and Outreach

**CARD**
Center for Agricultural and Rural Development
Conclusion

- Current use of conservation varies by practice throughout Iowa
- Presence of conservation on rented (vs. owned) land differs by practice
  - More no-till acres
  - Fewer acres with buffers and ponds
- Landowners are open to using cover crops on their land in the future
Thank You!

Wendong Zhang  
Assistant Professor and Extension Economist  
478C Heady Hall, Iowa State University  
515-294-2536  
wdzhang@iastate.edu

www.card.iastate.edu/china  
www.card.iastate.edu/farmland

https://store.extension.iastate.edu/product/6492