

What Women Landowners Want to Know about Conservation?

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2022 CONSERVATION WEBINAR SERIES



BUILDING A CULTURE OF CONSERVATION



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A Quick Introduction: Dr. Wendong Zhang

- Grew up in a rural county in Shandong Province, China
- Attended college in Shanghai and Hong Kong
- Ph.D. in Ag Econ from Ohio State in 2015
- Worked at Iowa State for 7 years, leading the Iowa Land Value Survey
- Moved to Cornell University Dyson School of Applied Economics & Mgmt in July 2022 (50% extension appointment)
- **2022 Iowa Land Value Survey results on Dec 13th at 10am:**
<http://bit.ly/LandResults2022>
- Research and extension interests:
 - land value/ownership** <https://www.card.iastate.edu/farmland>
 - ISU China Ag Center** <https://www.card.iastate.edu/china>
 - Cornell Institute for China Economic Research (CICER) <http://china.dyson.cornell.edu/>
 - Cornell Atkinson Center for Sustainability: <https://www.atkinson.cornell.edu/>

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- *Your name*
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Attendance for the live webinar will be verified and your name and CCA/CPAg/CPSS/CPSC number will be submitted on the sign-in sheet for this CEU to the CCA board **(if the CEU is approved)**

Half of leased land is owned by women

2017 Iowa Farmland
Ownership & Tenure Survey
**2022 Results to be
released in June 2023**

Percentage of Acres Rented



Figure 2. Baseline for Farm Bill Programs, by Title

(\$ billions; \$1,033 billion over 10 years, FY2022-FY2031)

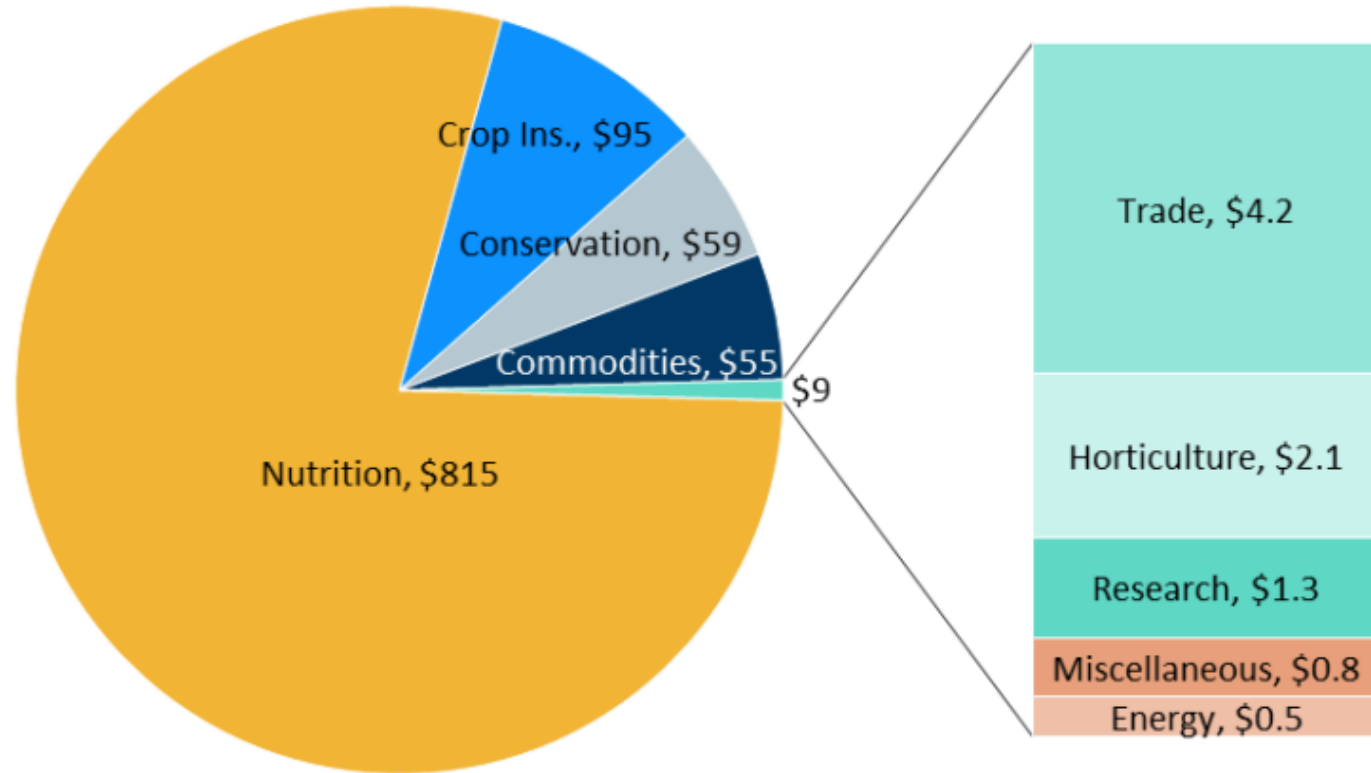
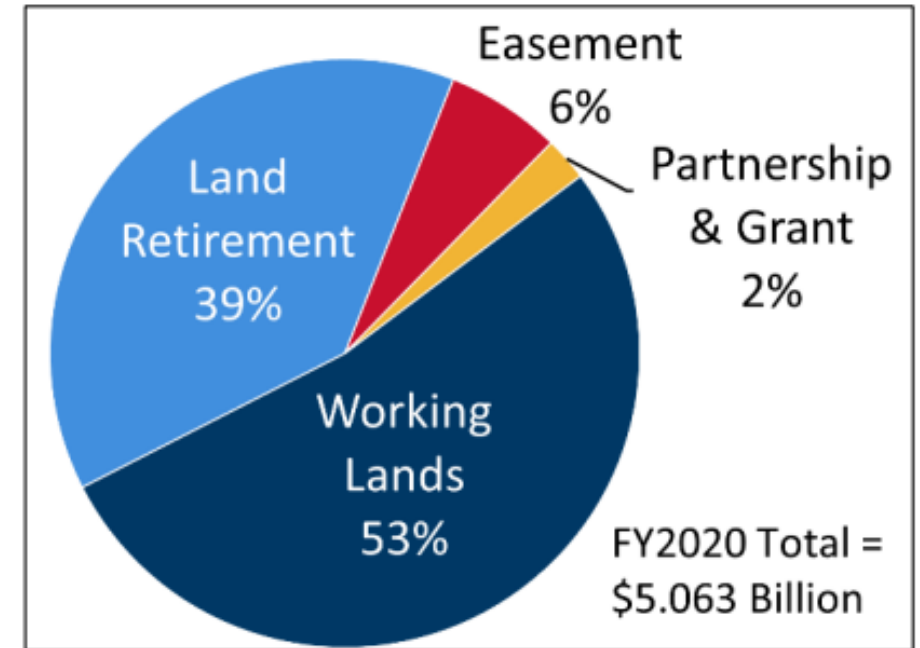


Figure 5. FY2020 Conservation Outlays

Total by program type



Source: Created by CRS using CBO, *Baseline Projections: USDA's Farm Programs*, July 2021.

Source: Created by CRS using CBO, "Details About Baseline Projections for Selected Programs," July 2021 baselines (for the commodities, conservation, trade, nutrition, and crop insurance titles); and CRS Report R45425, *Budget Issues That Shaped the 2018 Farm Bill*; and amounts indicated in law for programs in other titles.

Notes: Excludes changes not yet incorporated, such as to the Thrifty Food Plan. Supplemental trade and pandemic assistance are not part of the baseline.

Survey

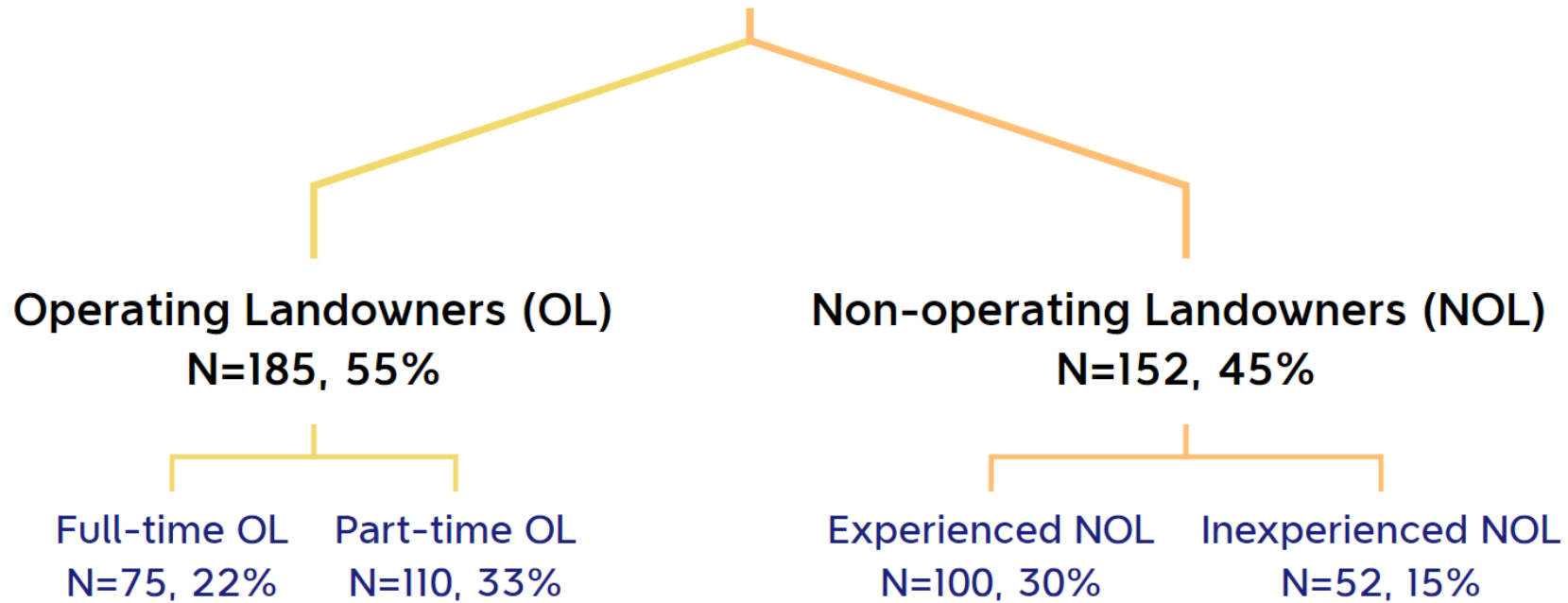
- 358 completed responses to the women landowner survey
 - web/mail survey from July 30 through October 20, 2021
 - response rate of 52.0% (358/688)
 - 135 (38%) are from ISU Extension and Outreach Women in Ag programs, 222 (62%) are from the Iowa Farmland Ownership and Tenure study
- Goal: offer information and resources to help women meet the challenges of implementing new conservation practices by studying their
 - interest in conservation topics
 - concerns on conservation issues
 - preferences for receiving educational programming

Policy brief available at

<https://www.card.iastate.edu/products/publications/pdf/22wp633.pdf>

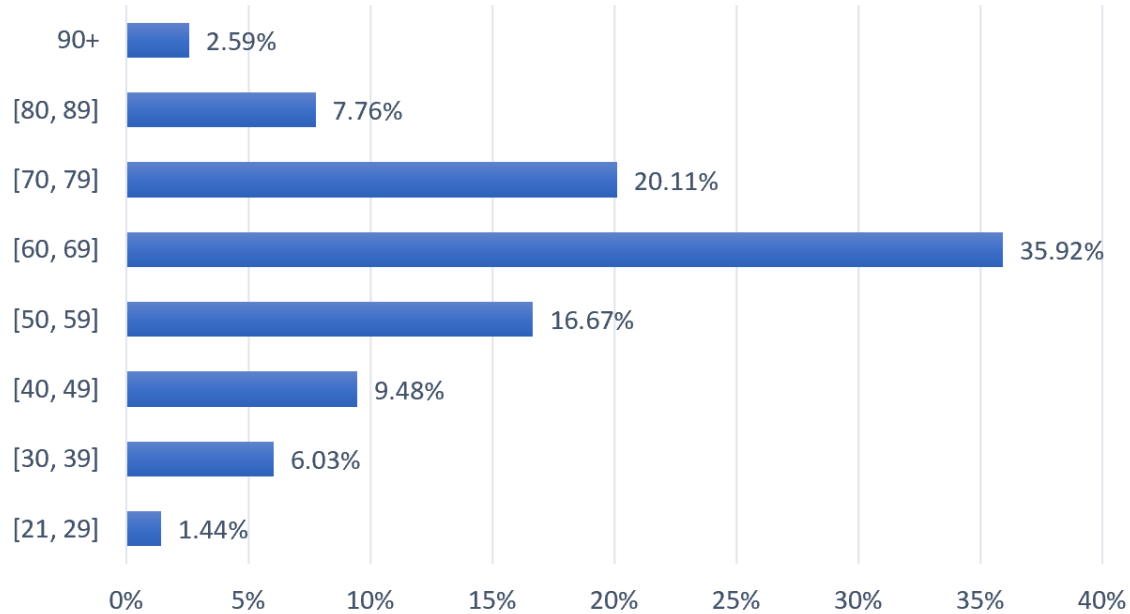
Who are women landowners - Operating Status

Iowa Women Landowners N=337

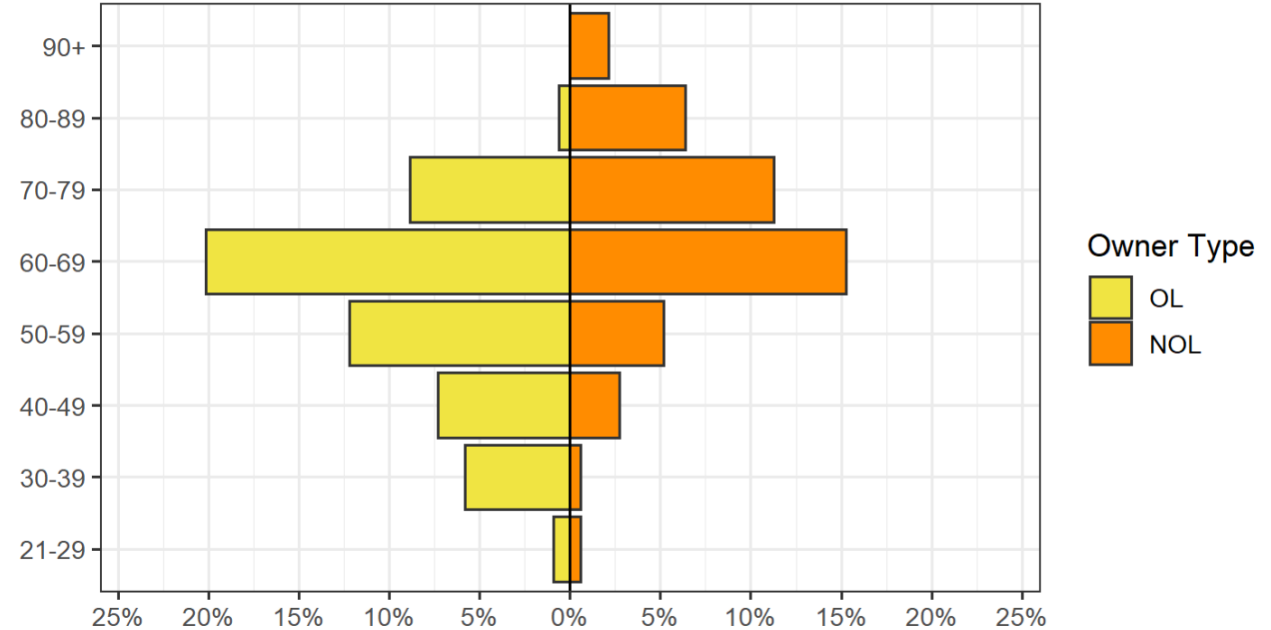


Who are women landowners - Age

Age Districition of All Landowners



Age Distribution of OL v.s. NOL



- Overall

Mean age: 63

Min: 21 Max: 98

- OL

Mean age: 58

Min: 28 Max: 87

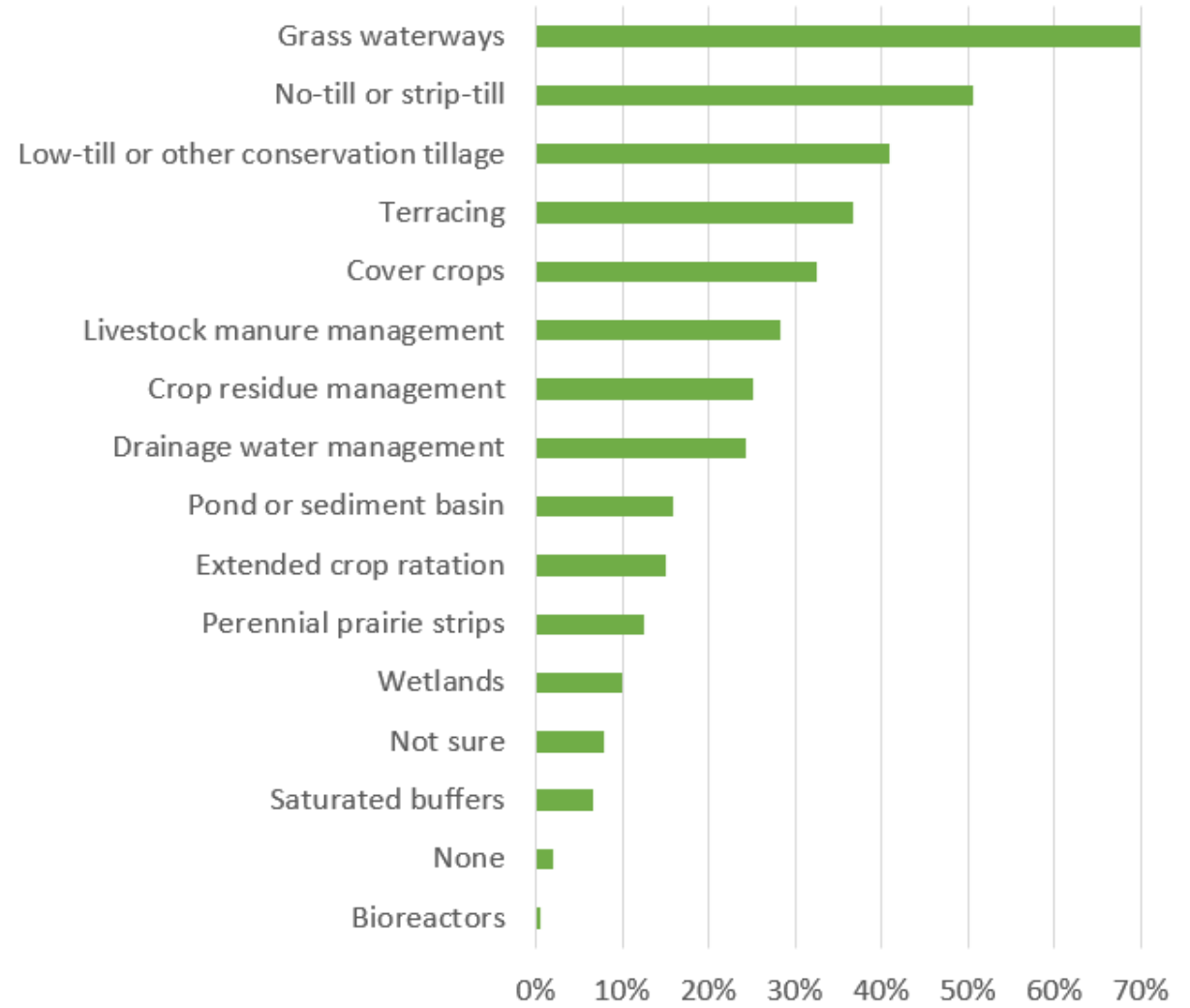
- NOL

Mean age: 68

Min: 21 Max: 98

Conservation Practice Adoption

- Compared to the overall adoption rate in Iowa reported by USDA, the adoption rate of women landowners in our survey is relatively high
- Should be interpreted as % of owners with *any* acre adopted on their land (e.g., 80-acre cover crops on a 400-acre farm)



Wendiam Sawadgo, Wendong Zhang, Alejandro Plastina

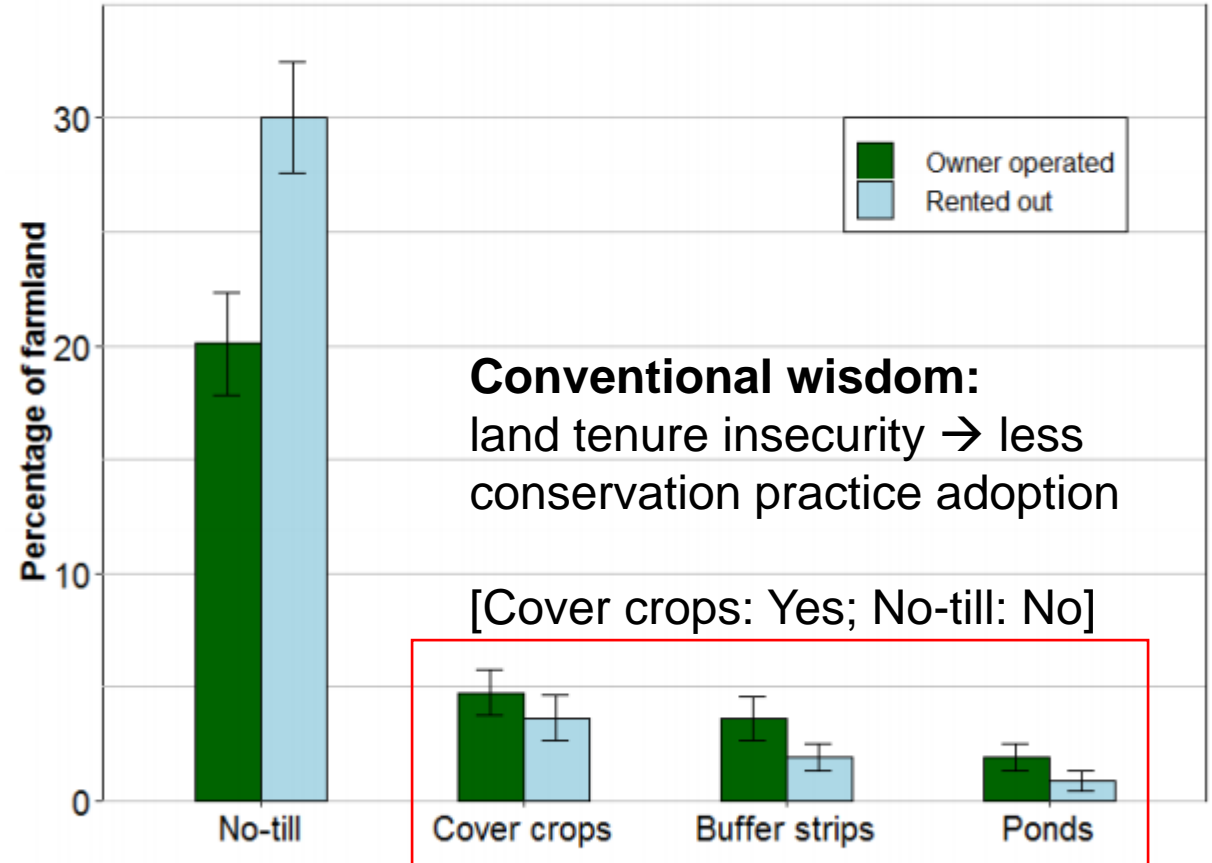
September 2020 [20-WP 610]

| | Owners | Acres |
|----------------------|--------|-------|
| No till | 21% | 27% |
| Cover crops | 5% | 4% |
| Buffer strips | 3% | 3% |
| Ponds | 1% | 2% |

Iowa Farmland Ownership and Tenure Survey, 1982-2017: A Thirty-Five Year Perspective

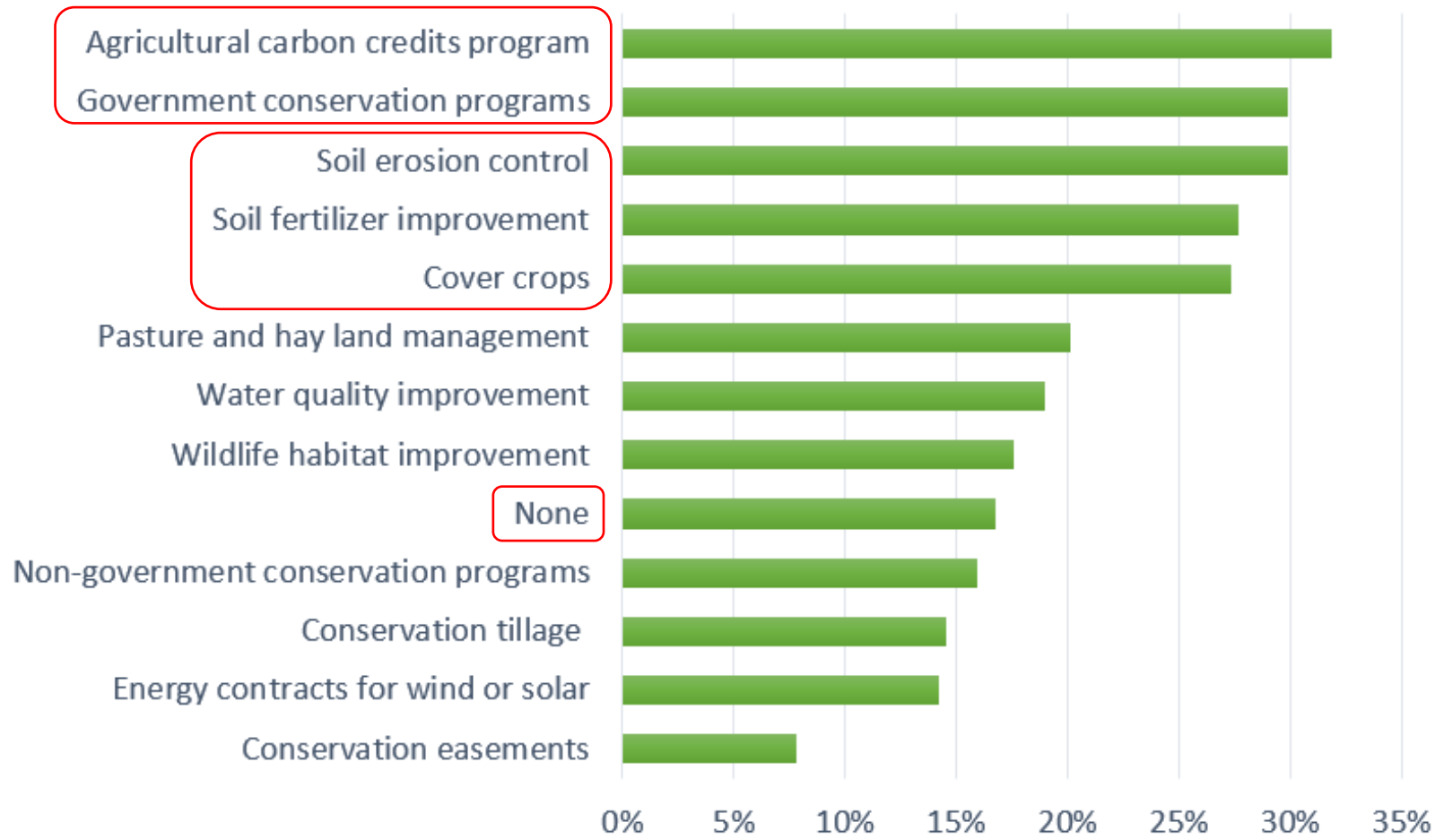
Figure 3

Iowa conservation practice farmland shares by land tenure and practice type.



Bars reflect standard error of the mean.

Interest in Conservation Topics



- Higher interest in the top 5 topics
 - Conservation programs
 - Soil conservation practices
- Disperse interest of women landowners in conservation topics

Interest of OL vs NOL

| Conservation Topics | Percent of respondents expressing an interest | | |
|--------------------------------------|---|---------------------|-------------------------|
| | Total | Operating landowner | Non-operating landowner |
| Agricultural Carbon Credits Program | 33% | 42% | 24% |
| Government Conservation Programs | 31% | 30% | 32% |
| Soil Erosion Control | 31% | 29% | 33% |
| Soil Fertilizer Improvement | 29% | 33% | 24% |
| Cover Crops | 28% | 34% | 22% |
| Pasture and Hay Land Management | 20% | 28% | 14% |
| Water Quality Improvement | 19% | 21% | 17% |
| Wildlife Habitat Improvement | 18% | 20% | 17% |
| Non-government Conservation Programs | 17% | 21% | 12% |
| Conservation Tillage | 15% | 15% | 15% |
| Energy Contracts for Wind or Solar | 14% | 14% | 18% |
| Conservation Easements | 8% | 8% | 9% |
| No Interest | 17% | 10% | 26% |

- OLs are significantly more interested in receiving information on conservation topics than NOLs, especially for
 - Carbon credits
 - Non-government programs
 - Cover crops
 - Soil fertilizer improvement
 - Pasture management

Correlations among interest

- Percentages of the respondents simultaneously interested in two topics
- Reflect the correlation between the topics
 - High correlations among programs
 - government programs receive the widest interest

| | Agricultural carbon credits programs | Government conservation programs | Non-government conservation programs | Soil erosion control | Soil fertilizer improvement | Cover crops |
|--------------------------------------|--------------------------------------|----------------------------------|--------------------------------------|----------------------|-----------------------------|-------------|
| Agricultural carbon credits programs | 33% | 12% | 9% | 8% | 9% | 12% |
| Government conservation programs | 12% | 31% | 10% | 11% | 10% | 10% |
| Non-government conservation programs | 9% | 10% | 17% | 7% | 6% | 6% |
| Soil erosion control | 8% | 11% | 7% | 31% | 14% | 8% |
| Soil fertilizer improvement | 9% | 10% | 6% | 14% | 29% | 7% |
| Cover crops | 12% | 10% | 6% | 8% | 7% | 28% |

Interest across Residency

| Conservation topics | Landowner Iowa residency | | |
|--------------------------------------|--------------------------|-------------------|-----------------------|
| | In-county resident | In-state absentee | Out-of-state absentee |
| Agricultural Carbon Credits Programs | 34% | 31% | 40% |
| Government Conservation Programs | 28% | 42% | 40% |
| Non-government Conservation Programs | 15% | 22% | 28% |
| Water Quality Improvement | 20% | 18% | 8% |
| Conservation Easements | 9% | 6% | 8% |
| Soil Erosion Control | 30% | 35% | 40% |
| Soil Fertilizer Improvement | 31% | 22% | 28% |
| Cover Crops | 29% | 27% | 36% |
| Pasture and Hay Land Management | 24% | 10% | 8% |
| Conservation Tillage | 14% | 19% | 20% |
| Wildlife Habitat Improvement | 17% | 23% | 28% |
| Energy Contracts for Wind or Solar | 14% | 18% | 32% |
| No Interest | 17% | 18% | 16% |

- In-county resident: 78%
In-state absentee: 15%
Out-of-state absentee: 7%
- Residents have a higher interest in pasture management and lower interest in government programs than absentees
- less interested in water quality outside the state
→ effect of messaging inside Iowa

Interest across Age Groups

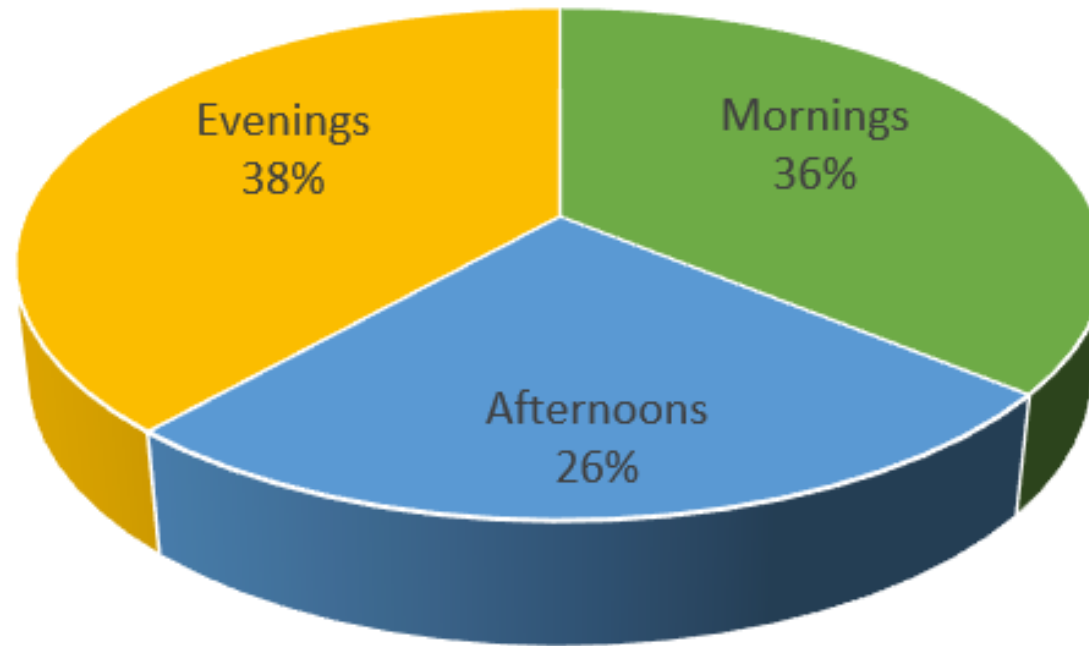
- Women 70+ show a significantly higher level of no interest in conservation topics than the two youngest groups
- Generally, 60+ women are less interested in conservation than women below 60, except for soil erosion control

| Conservation topics | 21–39 | 40–59 | 60–69 | 70+ |
|--------------------------------------|-------|-------|-------|-----|
| Agricultural Carbon Credits Programs | 35% | 40% | 38% | 24% |
| Government Conservation Programs | 27% | 28% | 34% | 32% |
| Non-government Conservation Programs | 19% | 24% | 17% | 9% |
| Water Quality Improvement | 23% | 15% | 29% | 14% |
| Conservation Easements | 12% | 8% | 9% | 7% |
| Soil Erosion Control | 27% | 23% | 32% | 40% |
| Soil Fertilizer Improvement | 31% | 36% | 23% | 30% |
| Cover Crops | 27% | 38% | 25% | 25% |
| Pasture and Hay Land Management | 50% | 28% | 15% | 15% |
| Conservation Tillage | 19% | 15% | 18% | 12% |
| Wildlife Habitat Improvement | 23% | 16% | 22% | 14% |
| Energy Contracts for Wind or Solar | 19% | 19% | 13% | 12% |
| No Interest | 8% | 11% | 17% | 25% |
| Number of Responses | 26 | 88 | 122 | 100 |

Concern on Conservation Issues

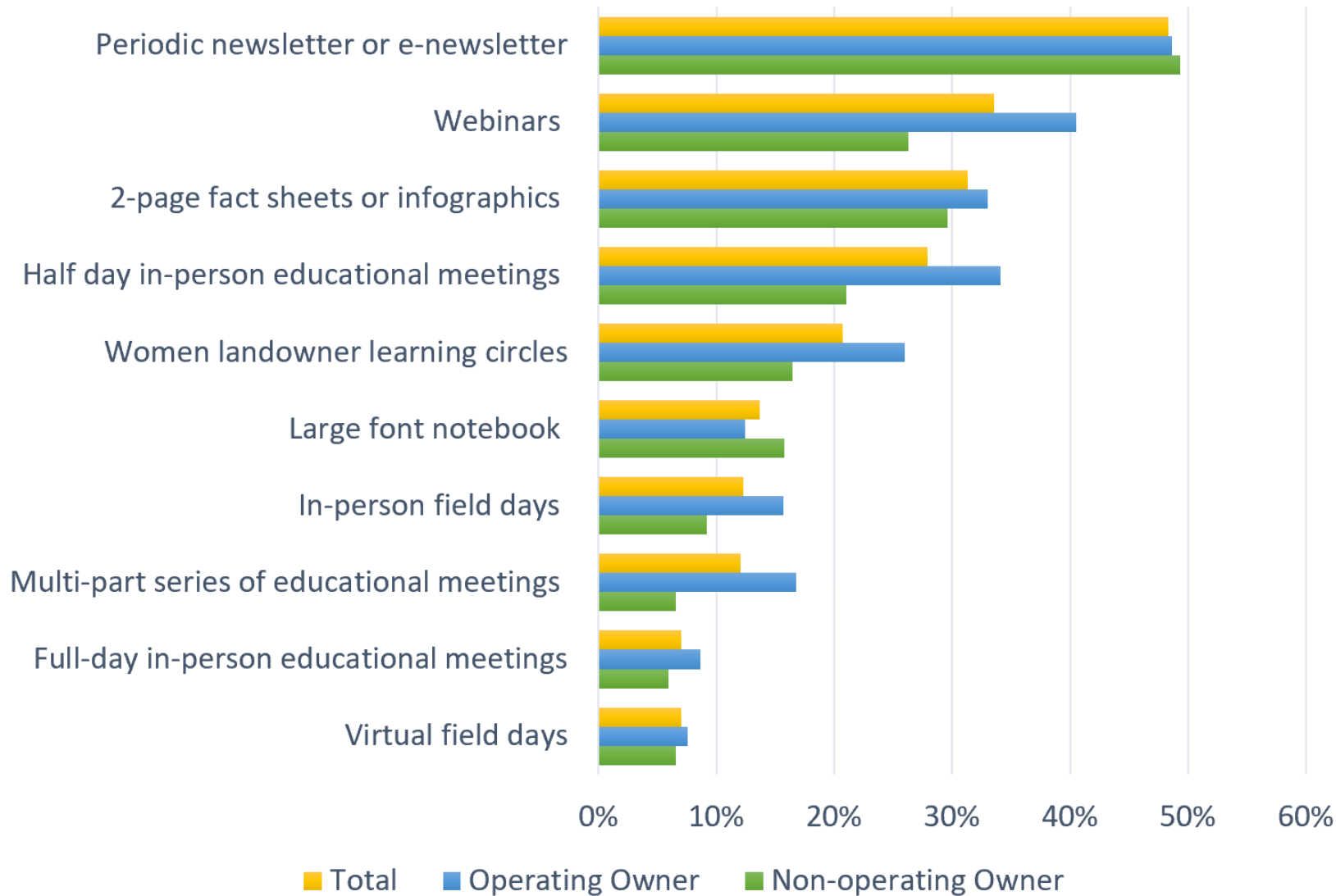
| Conservation-related issues | Percent of respondents concerned or very concerned | | |
|--|--|-----------------|---------------------|
| | Total | Operating owner | Non-operating owner |
| Too many requirements related to government programs | 69% | 76% | 60% |
| Interference with the ability to change management practices | 58% | 67% | 48% |
| Low cost-share payments | 54% | 62% | 49% |
| Unsure of the true value of the practices to the environment | 52% | 54% | 47% |
| Incorporating the practices into leases | 45% | 45% | 46% |
| Hard to find information about state/federal programs | 43% | 45% | 44% |
| Time consuming and laborious | 43% | 47% | 40% |
| Access to conservation equipment needed | 41% | 45% | 39% |
| Not familiar with conservation practices | 33% | 27% | 39% |
| Communication with tenants | 30% | 28% | 32% |
| Conservation practices may decrease the value of land | 29% | 26% | 32% |
| Don't know anyone implementing the practices | 26% | 21% | 30% |
| Discussion of the practices may upset family or co-owners | 18% | 17% | 22% |
| Disapproval from neighbors | 14% | 15% | 15% |

Educational Preference - Time



■ Mornings ■ Afternoons ■ Evenings

Educational Preference – Delivery Mode

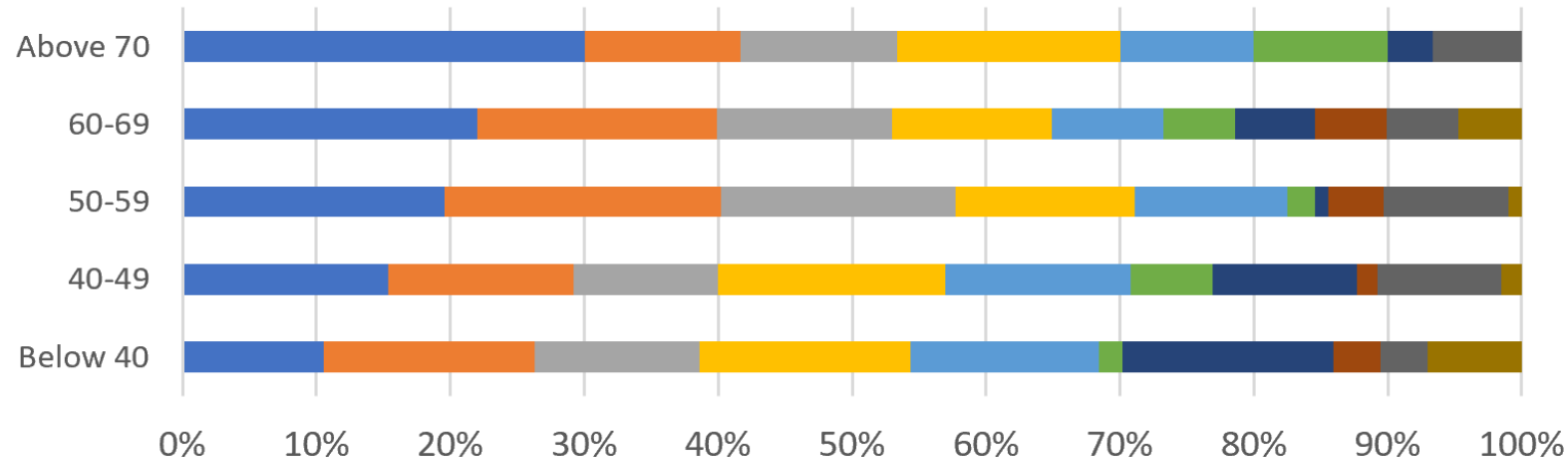


- Women prefer virtual delivery methods to in-person formats, while half-day in-person meetings are also welcome, ranking third for OLs and fourth for NOLs.
- OLs are more willing to receive educational information than NOLs
- Large gaps in webinars, half-day in-person meetings, women learning circles, and multi-part series of educational meetings

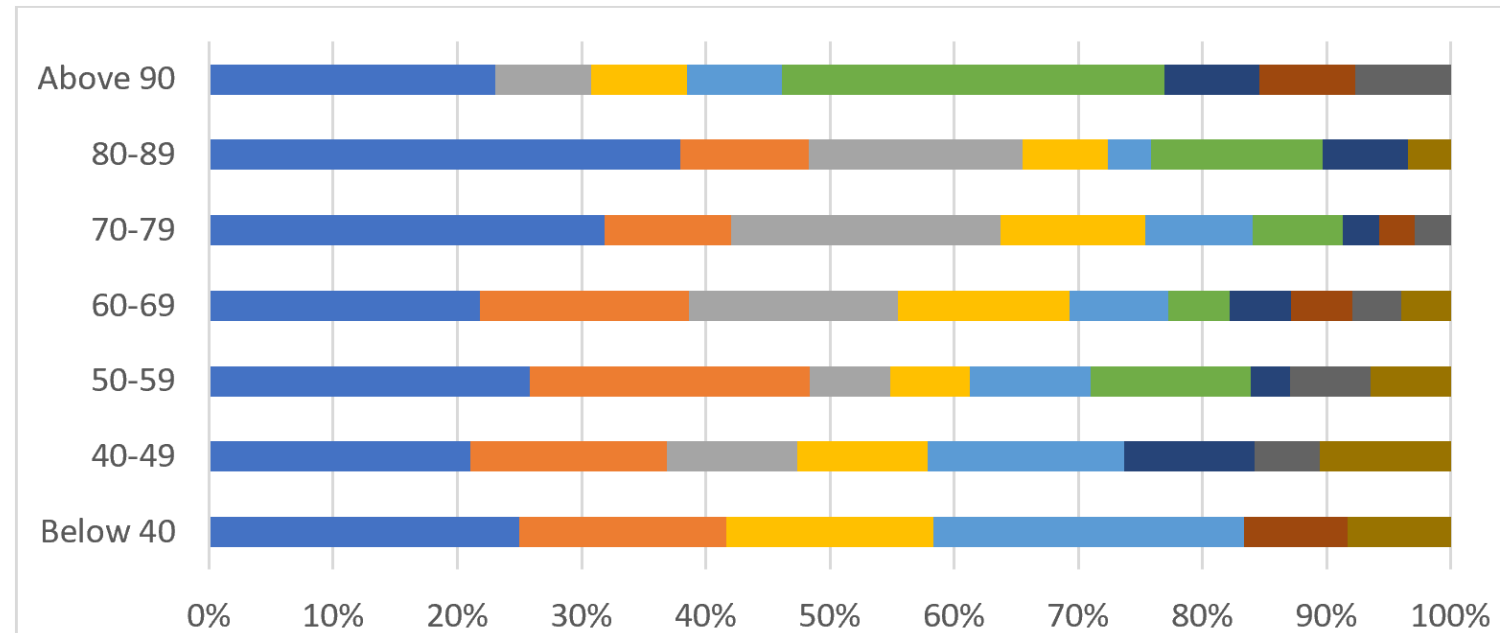
Educational Preference – by Age Groups and Operating Status

- Periodic newsletter or e-newsletter
- 2-page fact sheets or infographics
- Women landowner learning circles
- In-person field days
- Multi-part series of educational meetings
- Webinars
- Half day in-person educational meetings
- Large font notebook
- Full-day in-person educational meetings
- Virtual field days

(a) Operating owners' preferences by age groups



(b) Non-operating owners' preferences by age groups



Thank You!

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Wednesday, December 14

UNDERSTANDING THE OPPORTUNITIES AND CHALLENGES OF GRASS-TO-GAS: AN INTEGRATED MODELING STUDY FROM THE GRAND RIVER WATERSHED OF IOWA AND MISSOURI

Lisa Schulte Moore

Professor of Natural Resource Ecology and Management, Co-Director of the
Bioeconomy Institute
Iowa State University