

IOWA STATE UNIVERSITY

Extension and Outreach

IPM4Bees: Midwest Attitudes about Pollinator Friendly Practices



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Introduction

Learning about Iowan Attitudes on Pollinators

- Conducted survey of Iowa beekeepers, farmers, and landowners between 2018-2020
- GOAL: learn about current pollinator-friendly practices being implemented by Iowans and overall interest in such practices
- Paper titled “Attitudes about Honey Bees and Pollinator-Friendly Practices: A Survey of Iowan Beekeepers, Farmers, and Landowners” accepted by the Journal of IPM



Introduction

Learning about Iowan Attitudes on Pollinators

- Part of a 3-year study to explore honey bee health in agricultural landscapes
- Funded by USDA/NIFA
- Conducted survey after extension talks about research, highlighting best management practices and IPM



United States Department of Agriculture
National Institute of Food and Agriculture



Methodology

Developing and conducting the survey

- Survey developed with social research specialists at the ISU Research Institute for Studies in Education (RISE)
- Three different surveys developed for three stakeholder groups: Beekeepers, Farmers, and Landowners
- Paper survey was handed out after extension presentations on best practices for protecting pollinators

Bee Health Survey for Landowners

9) How difficult or easy would it be to implement each practice?

	Very difficult	Somewhat difficult	Somewhat easy	Very easy
Participate in CRP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utilize CRP for a pollinator habitat (CP42)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Establish Prairie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10) How important, overall, do you feel it is to implement "pollinator-friendly" land management practices?

Not at all important ☐ Slightly important ☐ Somewhat important ☐ Very important ☐

11) Please indicate your agreement with each of the following items related to "pollinator-friendly" practices.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I would be interested in establishing pollinator habitat on my land if it is through a program that includes a financial incentive.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would be interested in establishing pollinator habitat on my land if I had more resources available such as technical advising or a guide/manual.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am interested in allowing beekeepers to move their hives to my land to provide better forage for their bees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12) How useful was this presentation for helping you learn about protecting pollinators?

Not at all useful ☐ Slightly useful ☐ Moderately useful ☐ Very useful ☐

13) Please share any additional feedback or suggestions for future presentations:

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Methodology

Developing and conducting the survey

- Some questions included multiple choice responses while others utilized a 5-point Likert scale
- Questions included:
 - Demographic information
 - Practices implemented prior to attending the presentation
 - Practices likely to be implemented after

Bee Health Survey for Landowners

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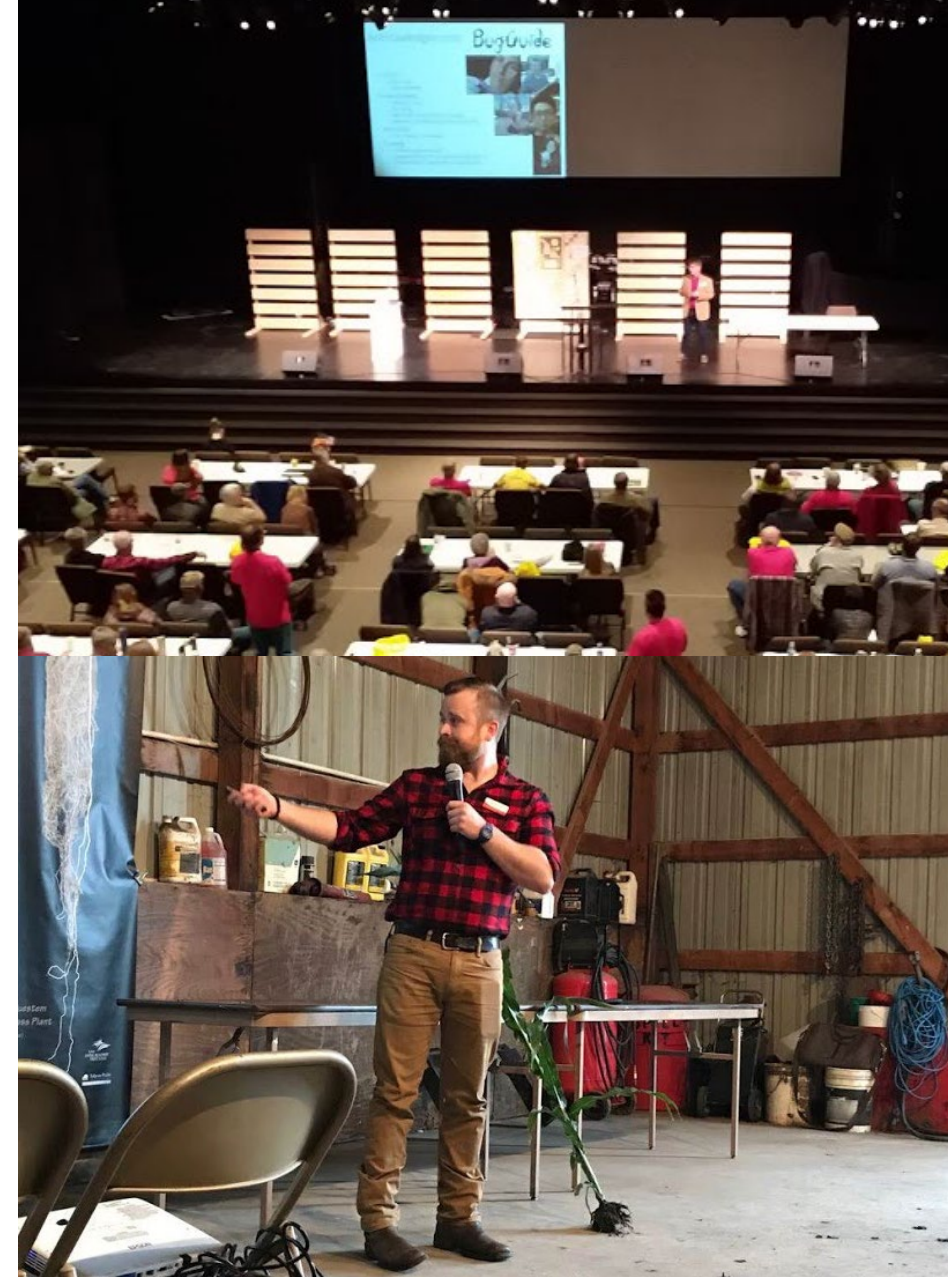
13) Please share any additional feedback or suggestions for future presentations:

Results

Survey collection

- 26 presentations given between February 2018 and February 2020 in 31 of Iowa's 99 counties
- 729 beekeepers, farmers, and landowners reached
- 391 surveys filled out

54%!



Beekeepers

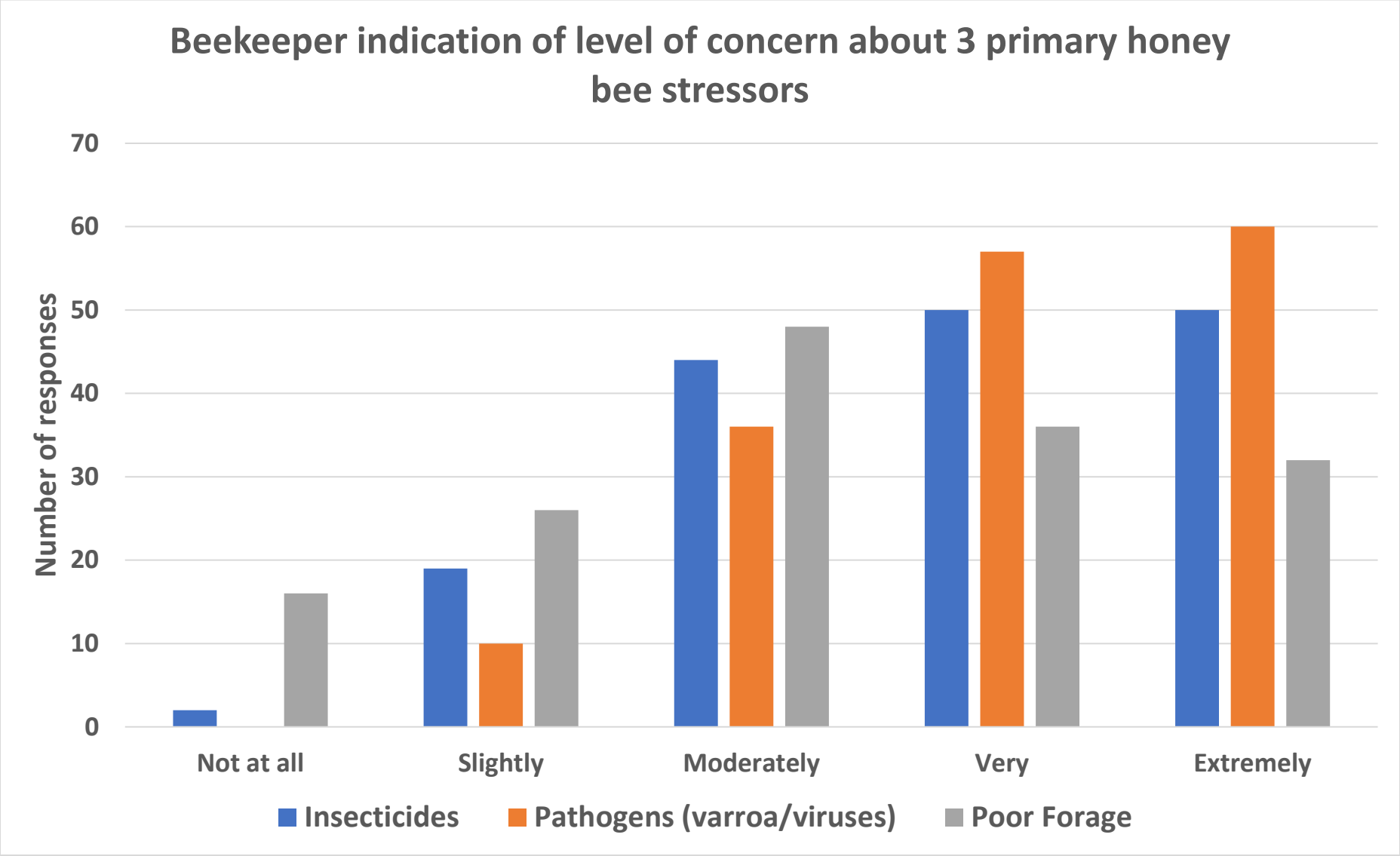
Survey Results

- 76% of respondents were over the age of 50
- 84% of respondents kept fewer than 10 hives (6% kept over 20)
- 53% registered their hives with the state apiary registry
- 49% identified row crop (corn and soybeans) as adjacent to their apiaries



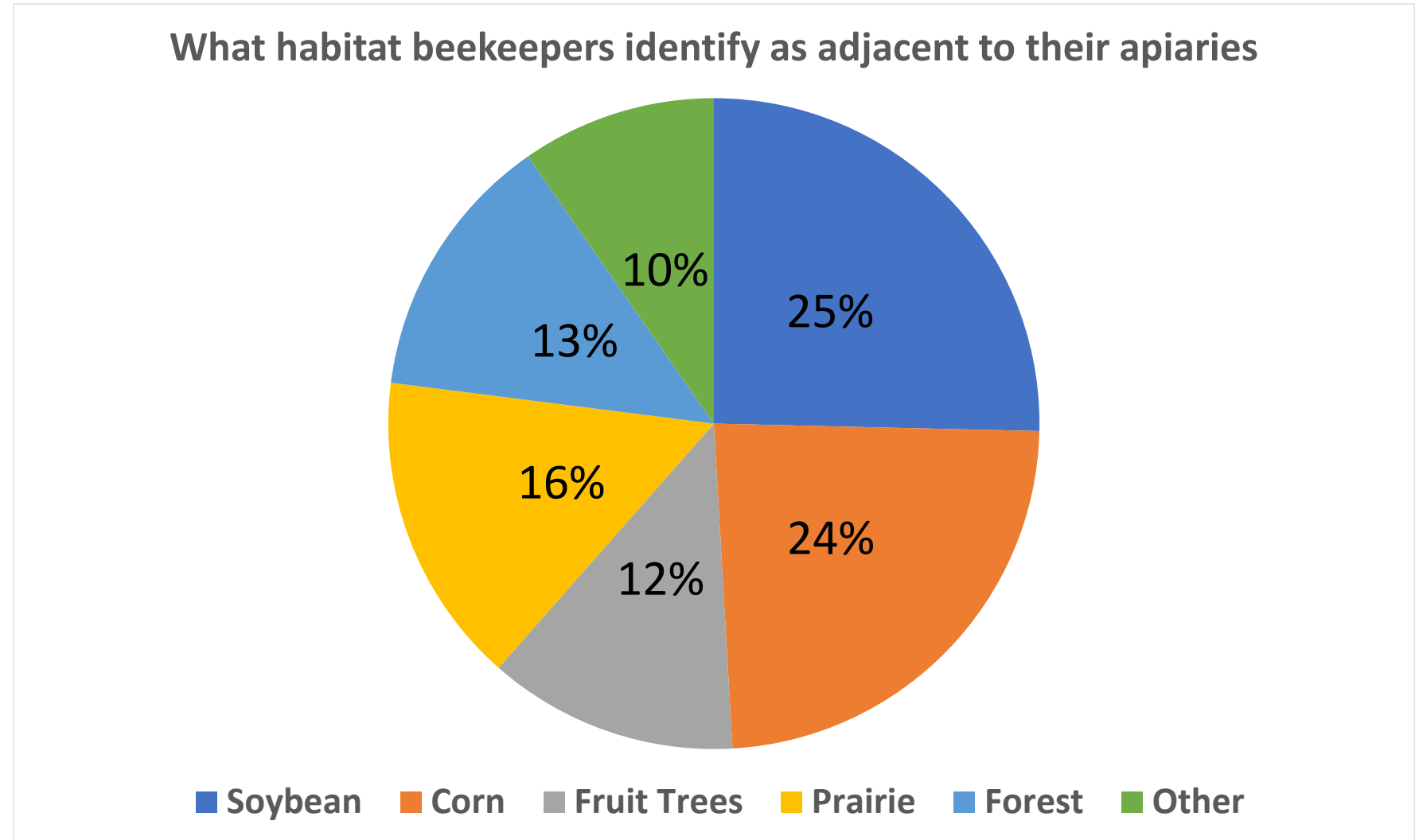
Beekeepers

Survey Results



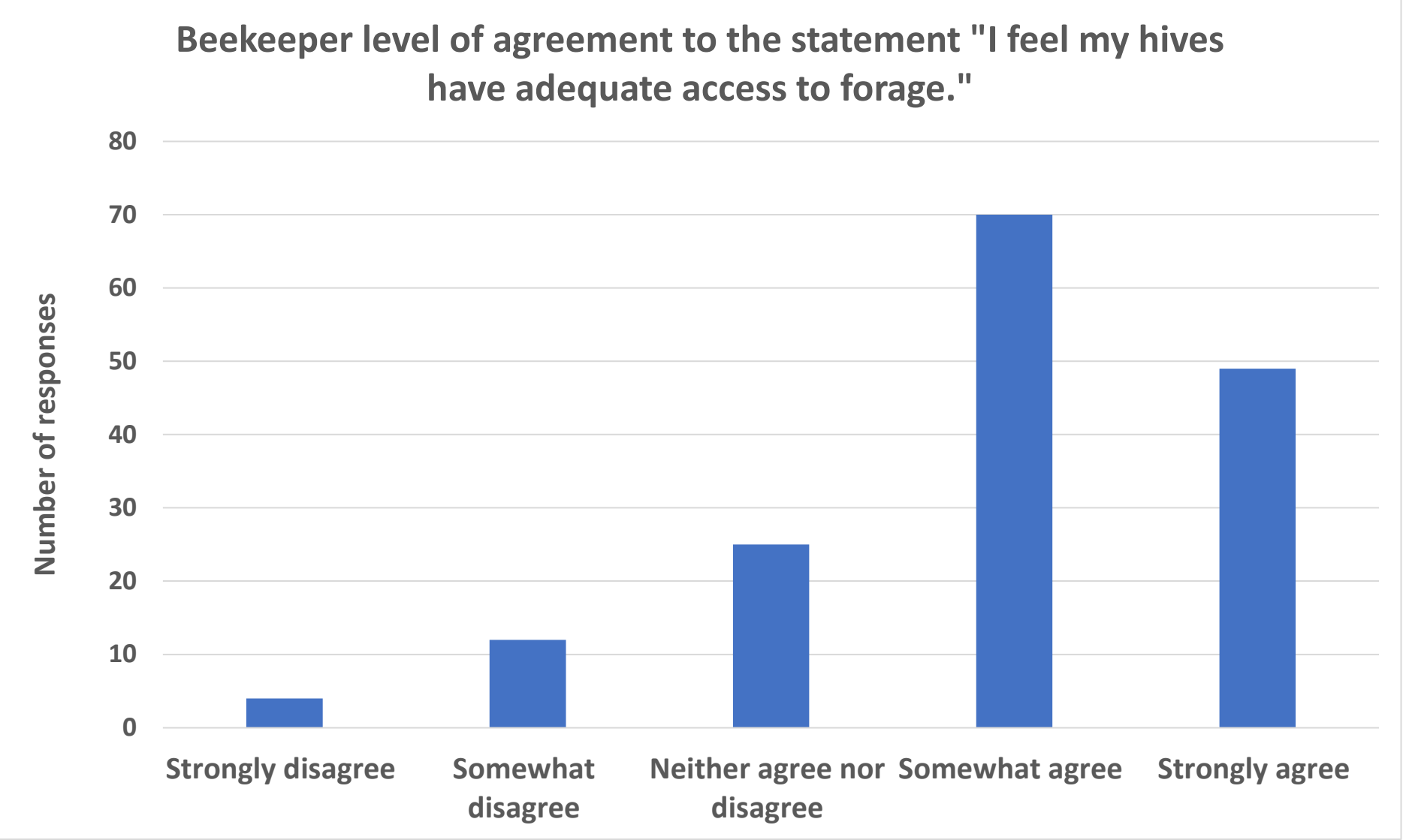
Beekeepers

Survey Results



Beekeepers

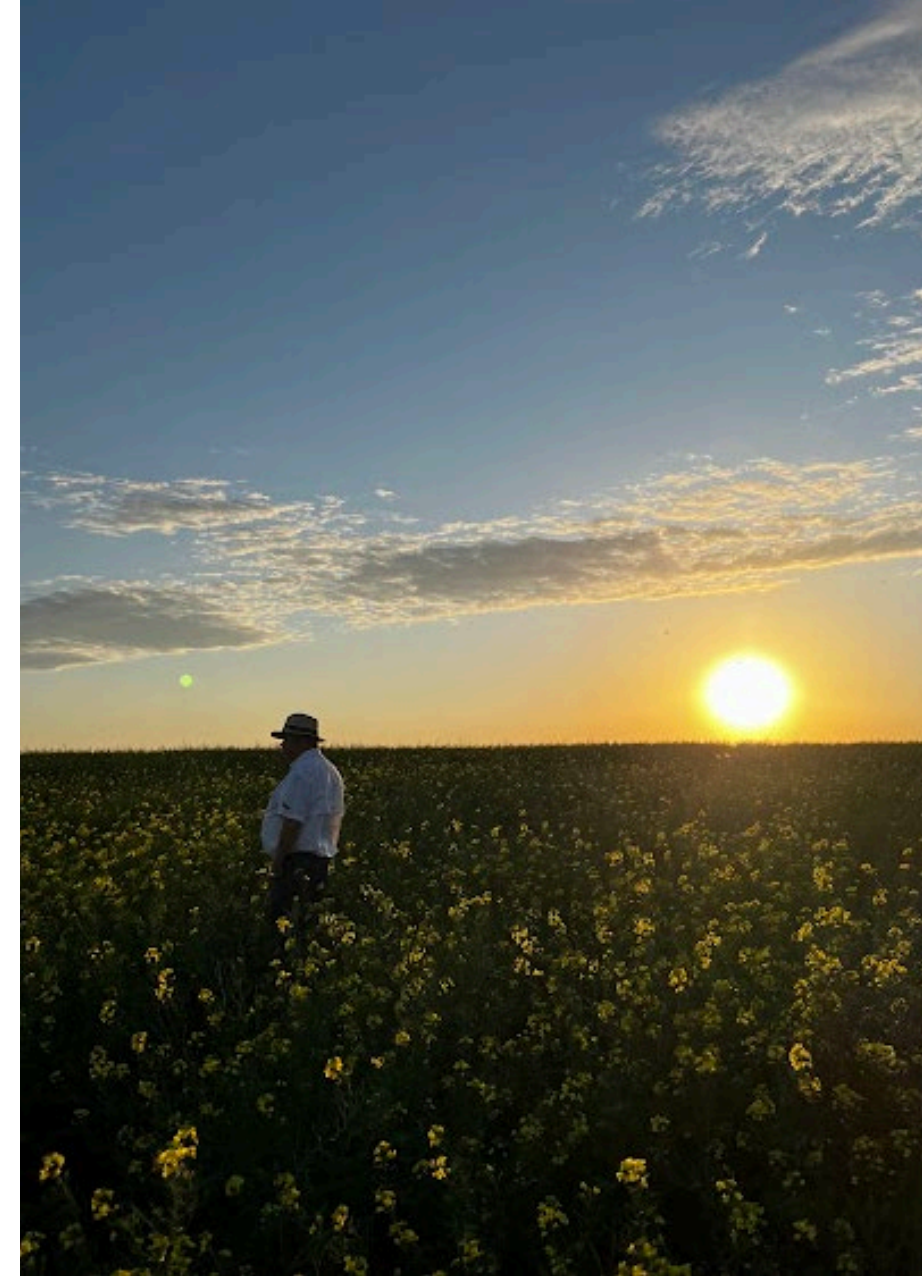
Survey Results



Farmers

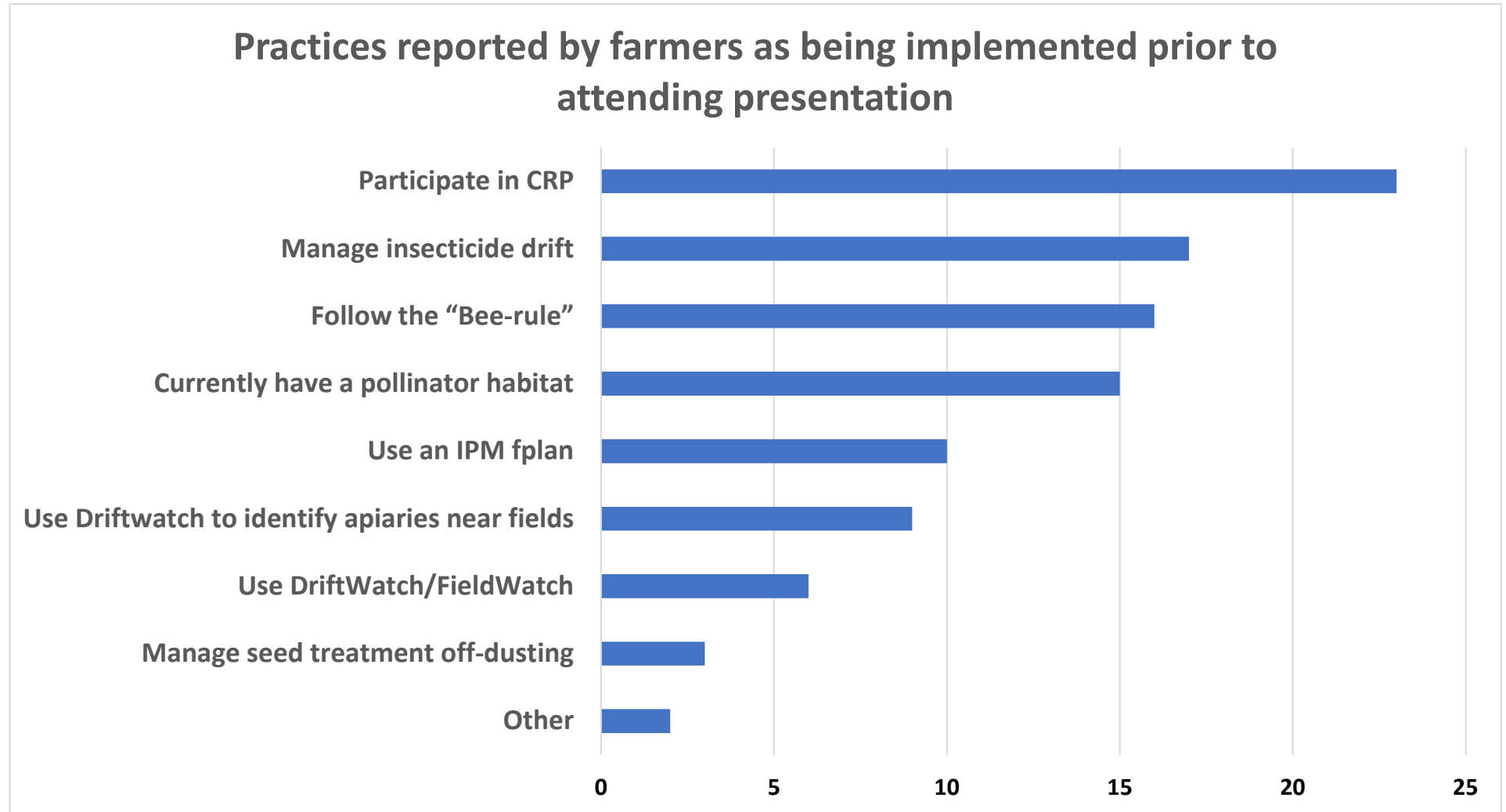
Survey Results

- **72% of respondents were over the age of 50**
- **Only 27% of respondents reported farming over 1,000 acres**
- **9% reported currently having beehives on their land**
- **92% believe implementing pollinator-friendly practices in somewhat important or very important**



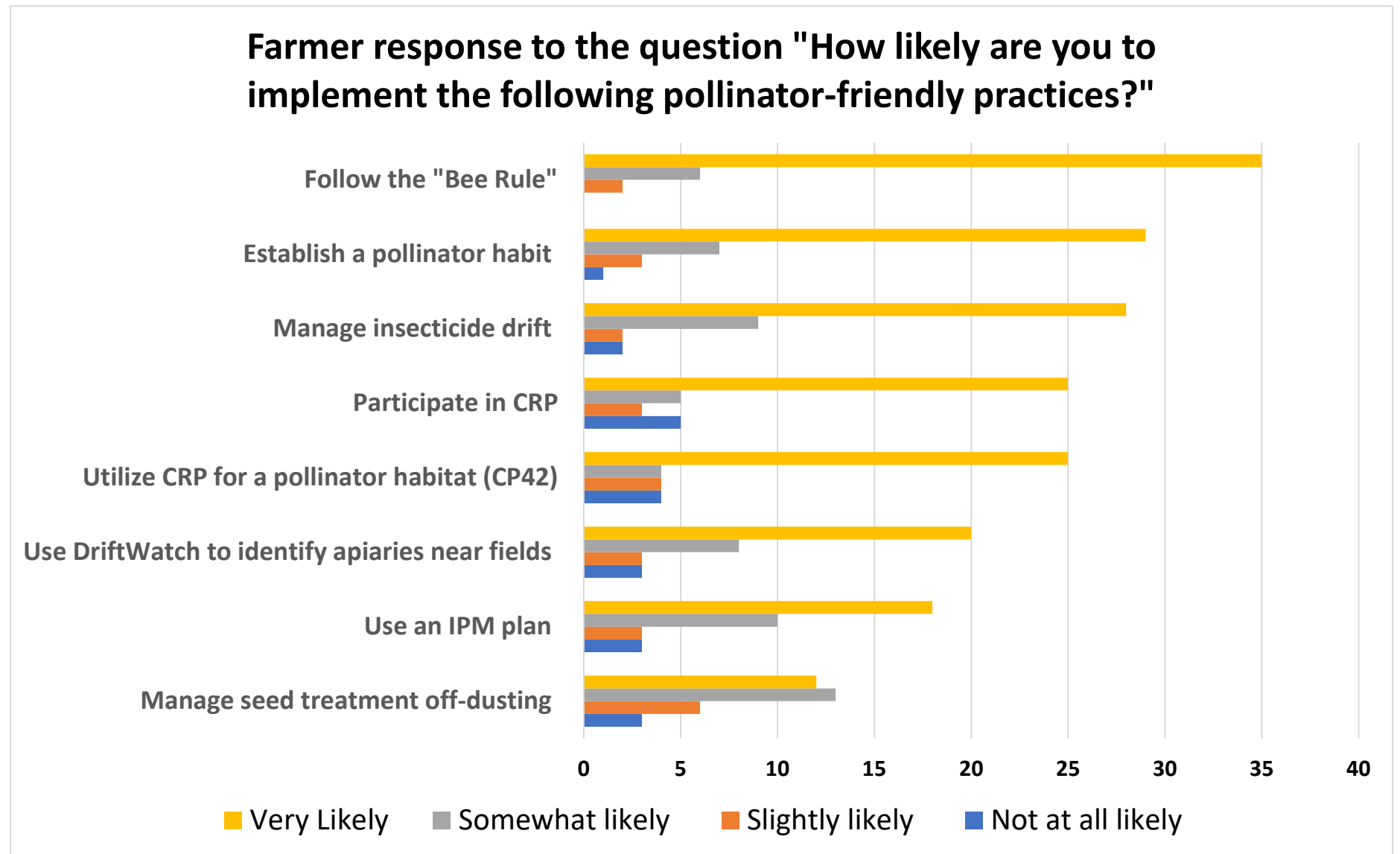
Farmers

Survey Results



Farmers

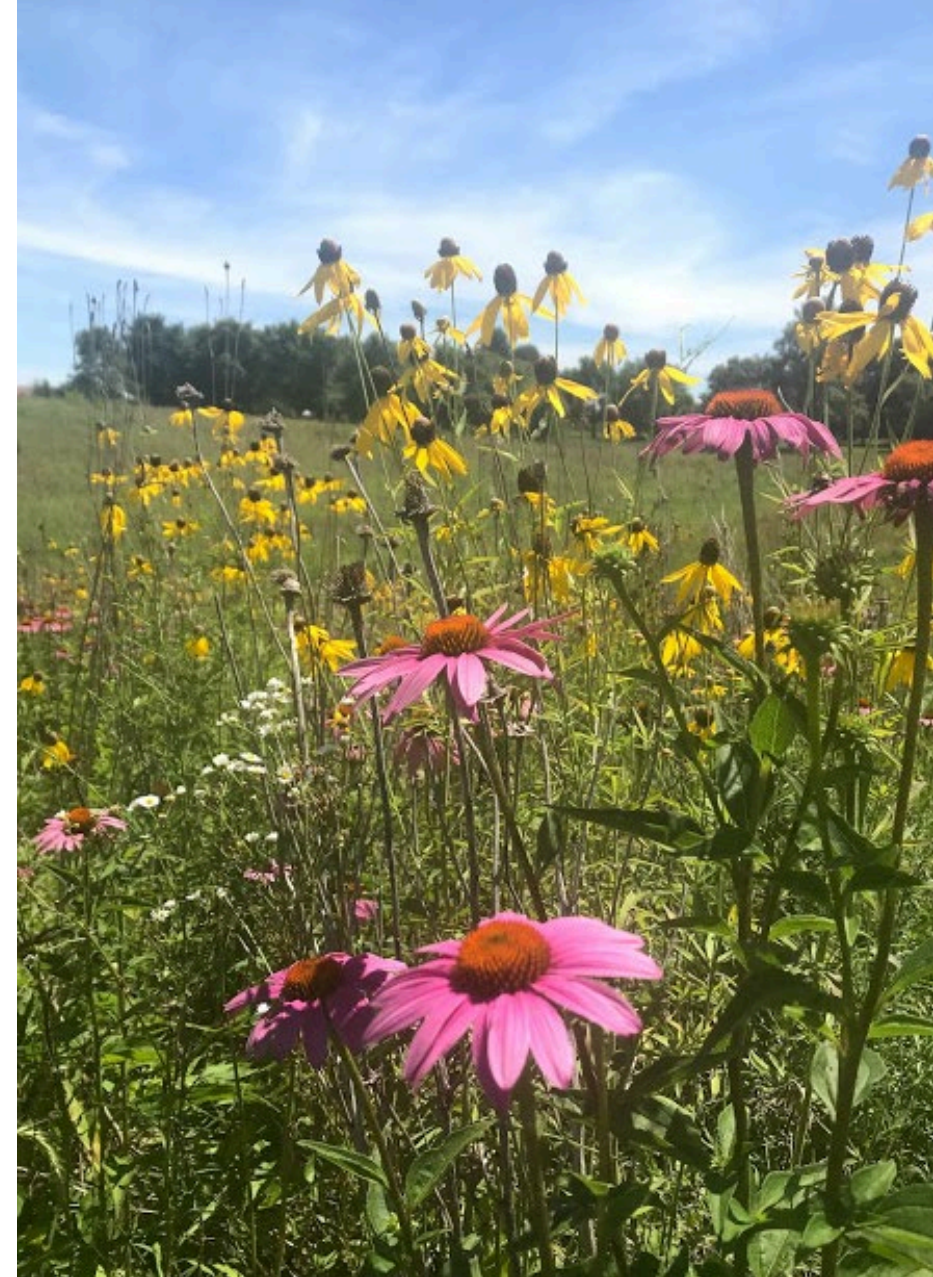
Survey Results



Landowners

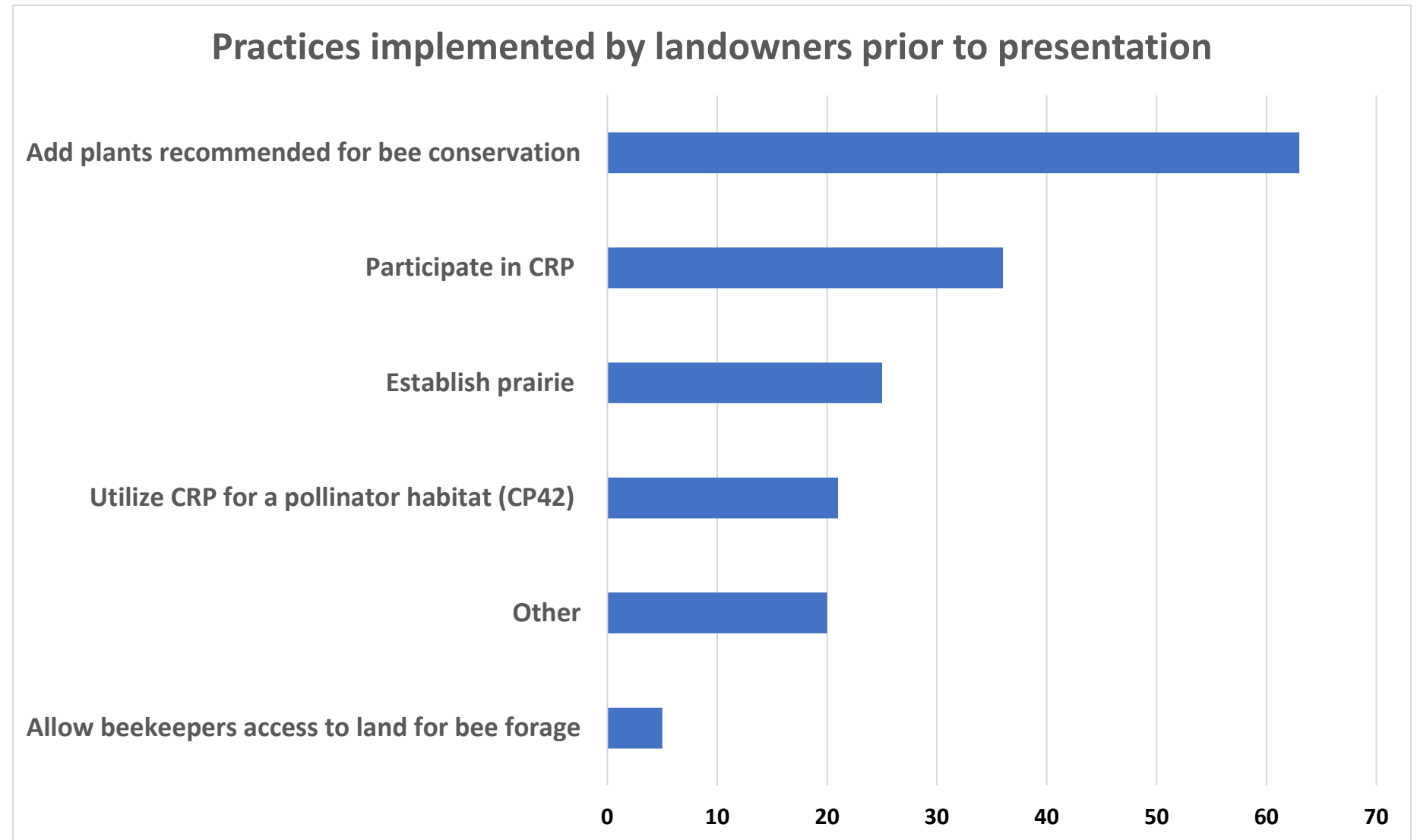
Survey Results

- 73% of respondents were over the age of 50
- 53% owned 10 acres or less, with 29% owning fewer than 1 acre
- 28% reported having land currently in agricultural production, with 22% reporting currently having CRP on their land
- 100% believe implementing pollinator-friendly practices in somewhat important or very important



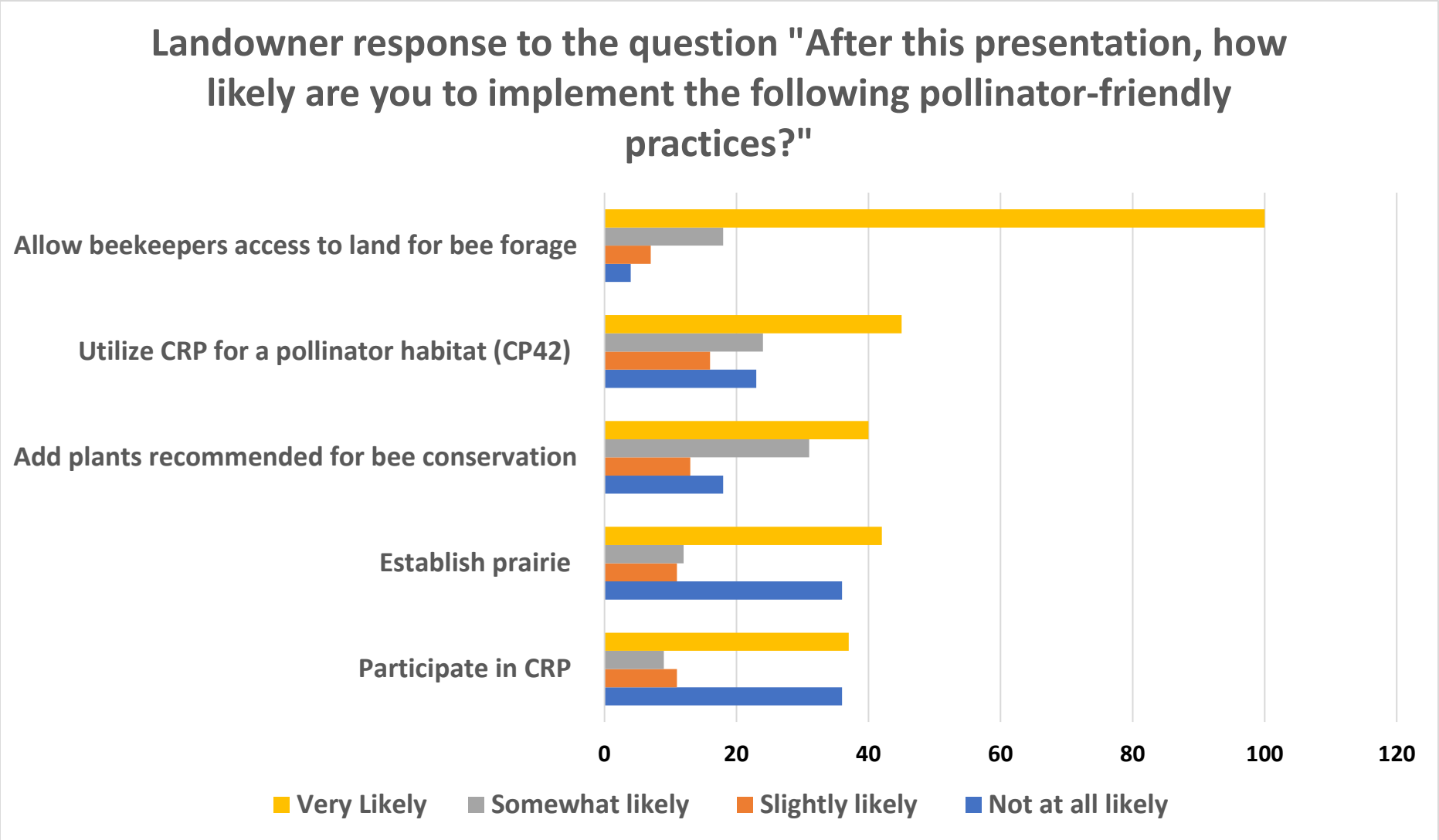
Landowners

Survey Results



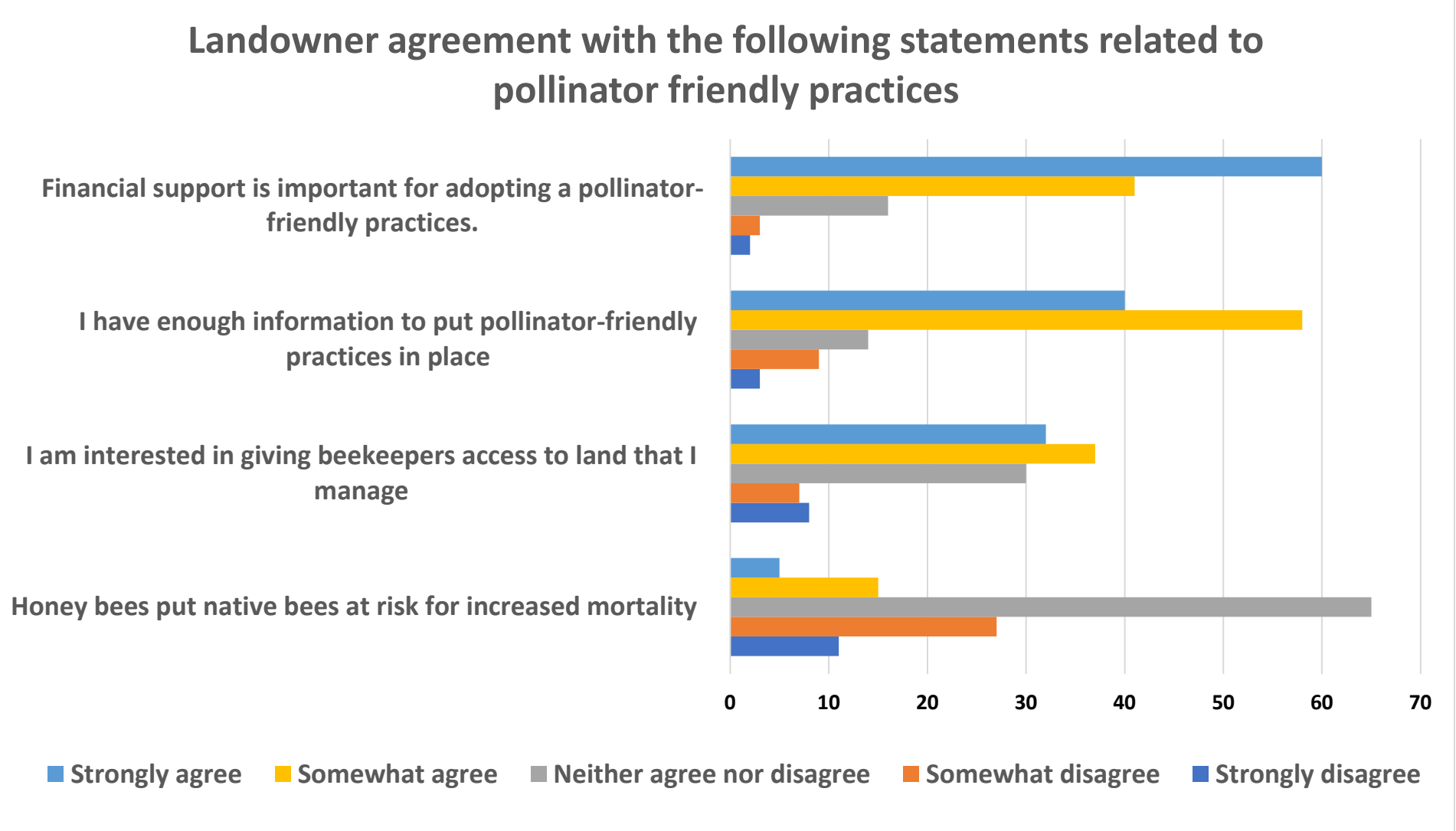
Landowners

Survey Results



Landowners

Survey Results



Conclusion

Highlights and directions for future outreach

- 92% of farmers and 100% of landowners believe implementing pollinator-friendly practices is *somewhat or very important*
- Beekeepers do not report a high level of concern for *poor forage* as a stressor, despite 49% keeping hives near row crop and ISU research demonstrating its importance in Iowa's agricultural landscapes
- Landowners expressed a high level of interest in inviting beekeepers to keep hives on their land
- There is a need to address the nuances of bee conservation and the potentially detrimental role honey bees may play. How do we discuss keeping honey bees in native bee habitat?

Acknowledgements

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Thank You

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