# Exploring the potential of woody perennials to integrate conservation and production in Missouri

## Raelin Kronenberg & Sarah Lovell

Center for Agroforestry
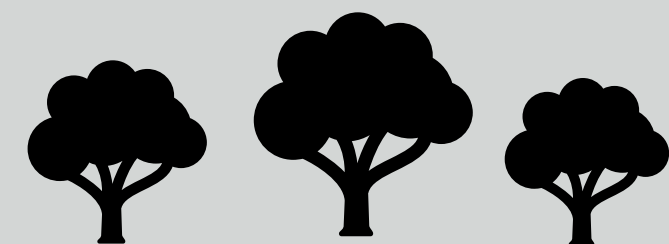University of Missouri

## Background

Natural resource concerns are impacting agricultural production and ecosystem function.

Federal conservation programs designed to manage resources - but have been criticized as too inflexible and complex.

Multifunctional landscapes, such as agroforestry, provide numerous environmental, economic, and social functions on the same area of land.

Missouri has agroforestry-specific EQIP funding which offers unique opportunity for conservation.

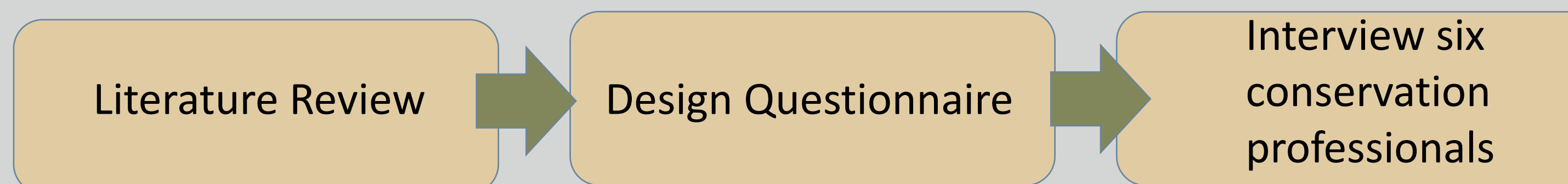Do natural resource agents understand the practices of agroforestry and promote their use by landowners?

## Objectives

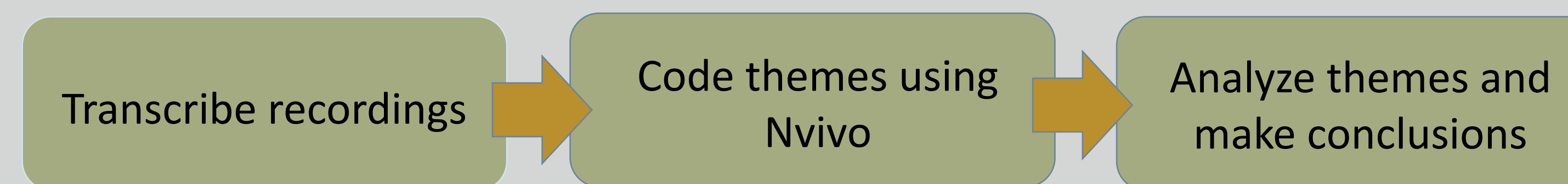**Engage with conservation program administrators to:**

- Establish common planting plans and species selections in conservation programs.

- Determine how agricultural landowners are supported when enrolling their land in conservation programs.

- Understand the extent to which natural resource professionals understand and promote agroforestry practices in Missouri conservation programs.
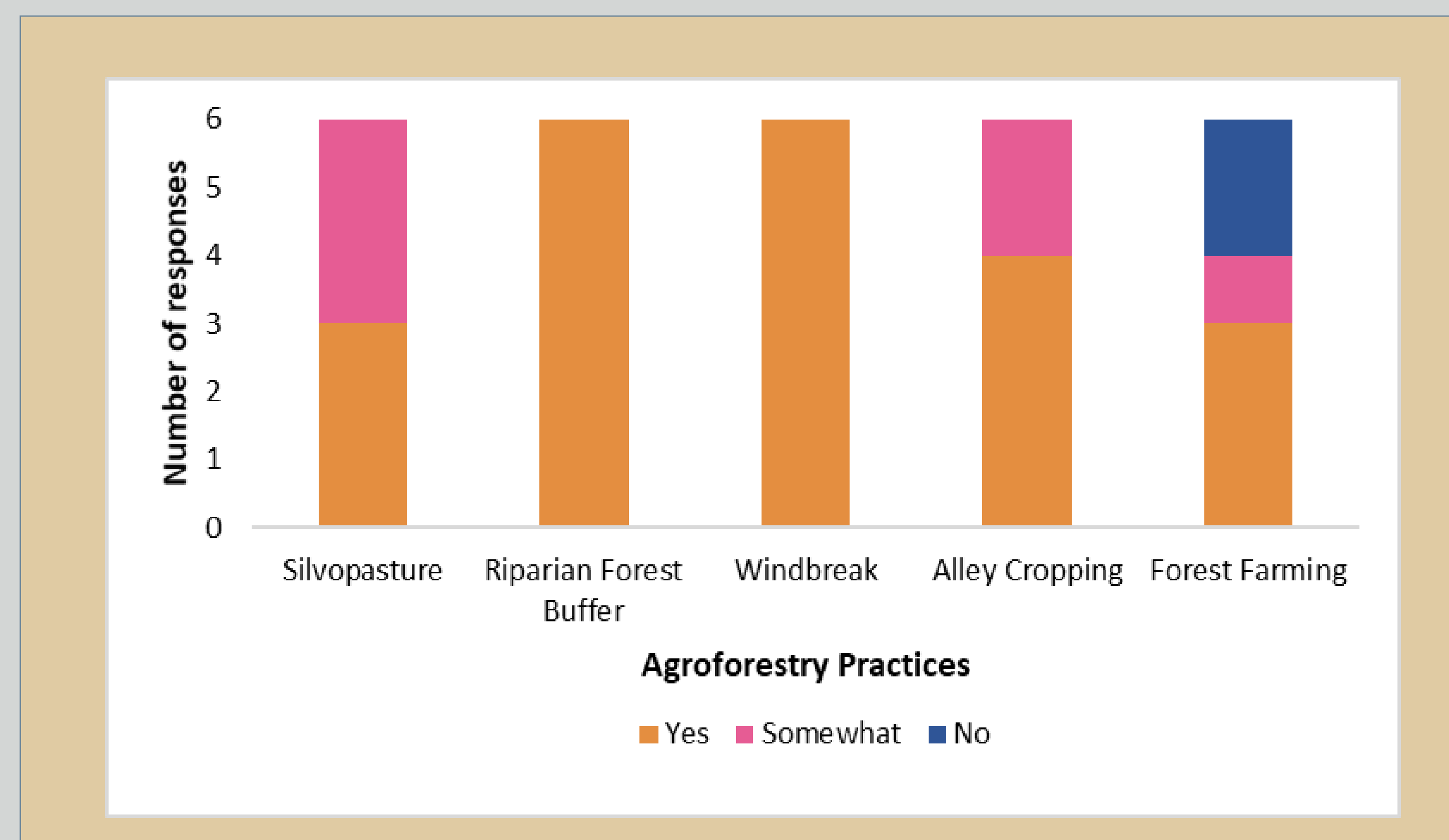
## Research Design & Findings

### 1. Methods

Literature Review → Design Questionnaire → Interview six conservation professionals

### 2. Analysis

Transcribe recordings → Code themes using Nvivo → Analyze themes and make conclusions

**Participants**

| Interviewee | Agency | Role |
|---|---|---|
| 1 | NRCS | Agricultural Economist |
| 2 | NRCS | Resource Conservationist |
| 3 | NRCS | Forester |
| 4 | NRCS | Forester |
| 5 | NWTF | Forester |
| 6 | NWTF | Forester |
| 7 | MU Extension | Natural Resource Specialist |

**Conclusion**

Fruit and nut producing trees for human and wildlife consumption show the greatest potential for multifunctional tree and shrub plantings in conservation programs

### Conservation Professional's Familiarity with Agroforestry Practices



Number of responses vs Agroforestry Practices (Silvopasture, Riparian Forest Buffer, Windbreak, Alley Cropping, Forest Farming). Legend: Yes, Somewhat, No

## Interview Themes

- **Landowner interest is there, but participation is limited by program funding, enrollment requirements and lack of awareness:**

*"...there is always more interest than, more applications than we can fill. You know, it's just a matter of dollars."*

- **The challenge of building long-term relationships in conservation:**

*"It's probably why it's actually a problem, because it's [recruitment] hard. Hard to figure out."*

- **Natural resource professionals wish for greater agroforestry knowledge and promotion:**

*"I think we do; we have done a good job of promoting agroforestry in Missouri. We can definitely do better. We just need to make sure we are sending out the right message."*

## Moving Forward

- Educating the educators on agroforestry.

- Bring attention to the potential of agroforestry to support conservation goals.

- For research:
  - Survey Missouri agricultural landowners.
  - Analyze preferences for landscape design and potential for agroforestry to support conservation.