

More than Maintenance:

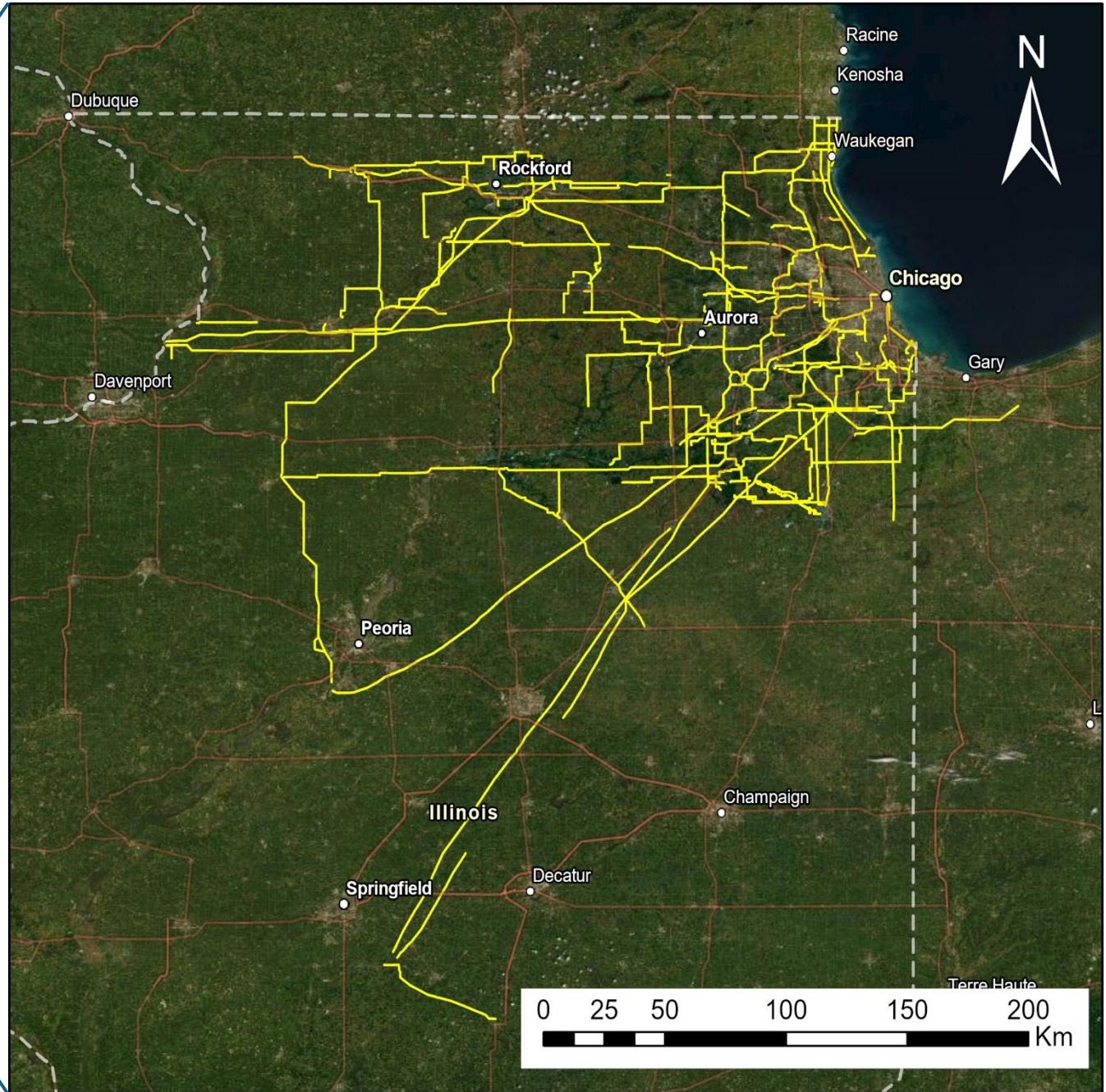
*How Vegetation Management
Shapes Community Perceptions
of Electricity Grid Corridors*



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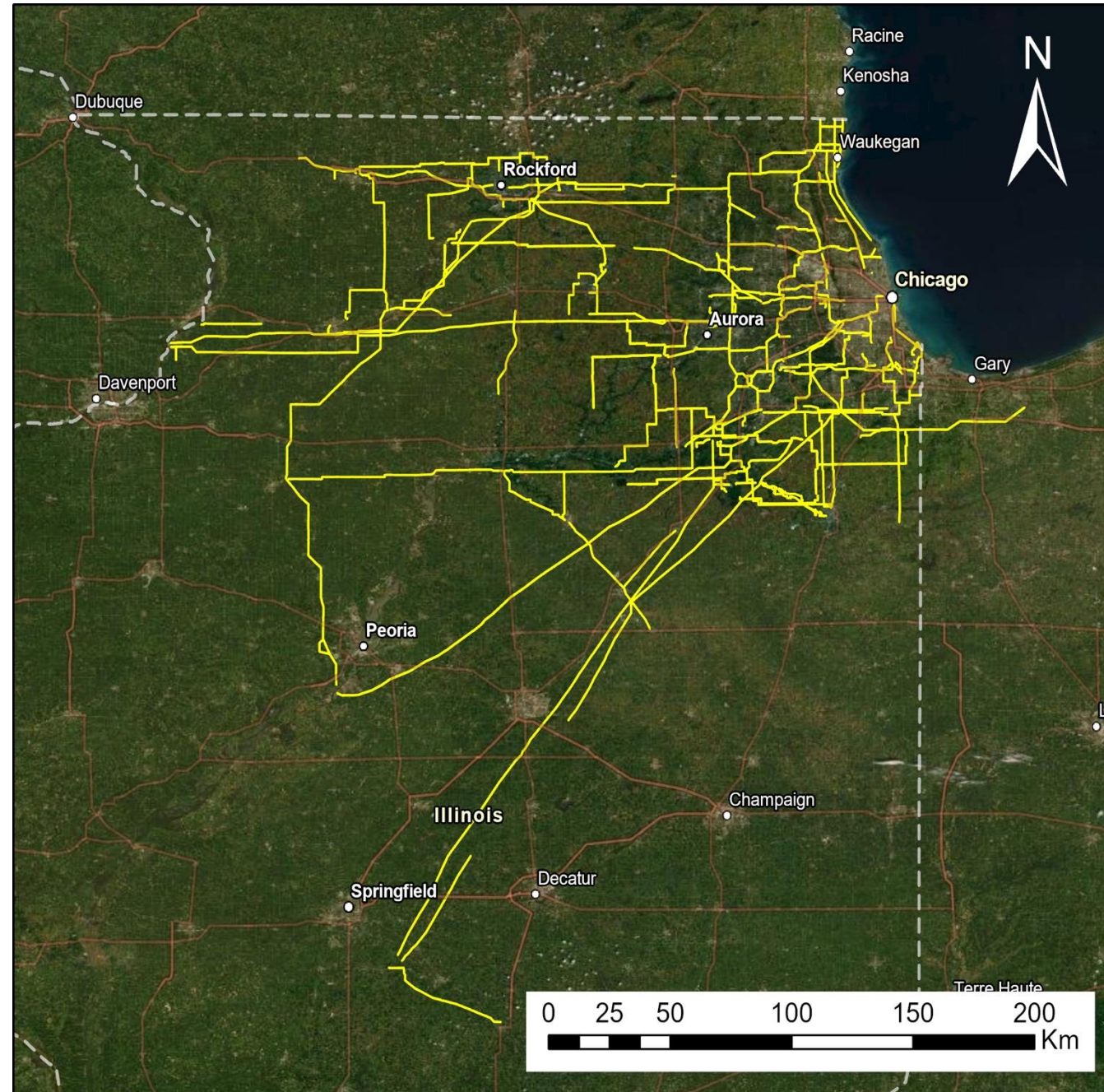




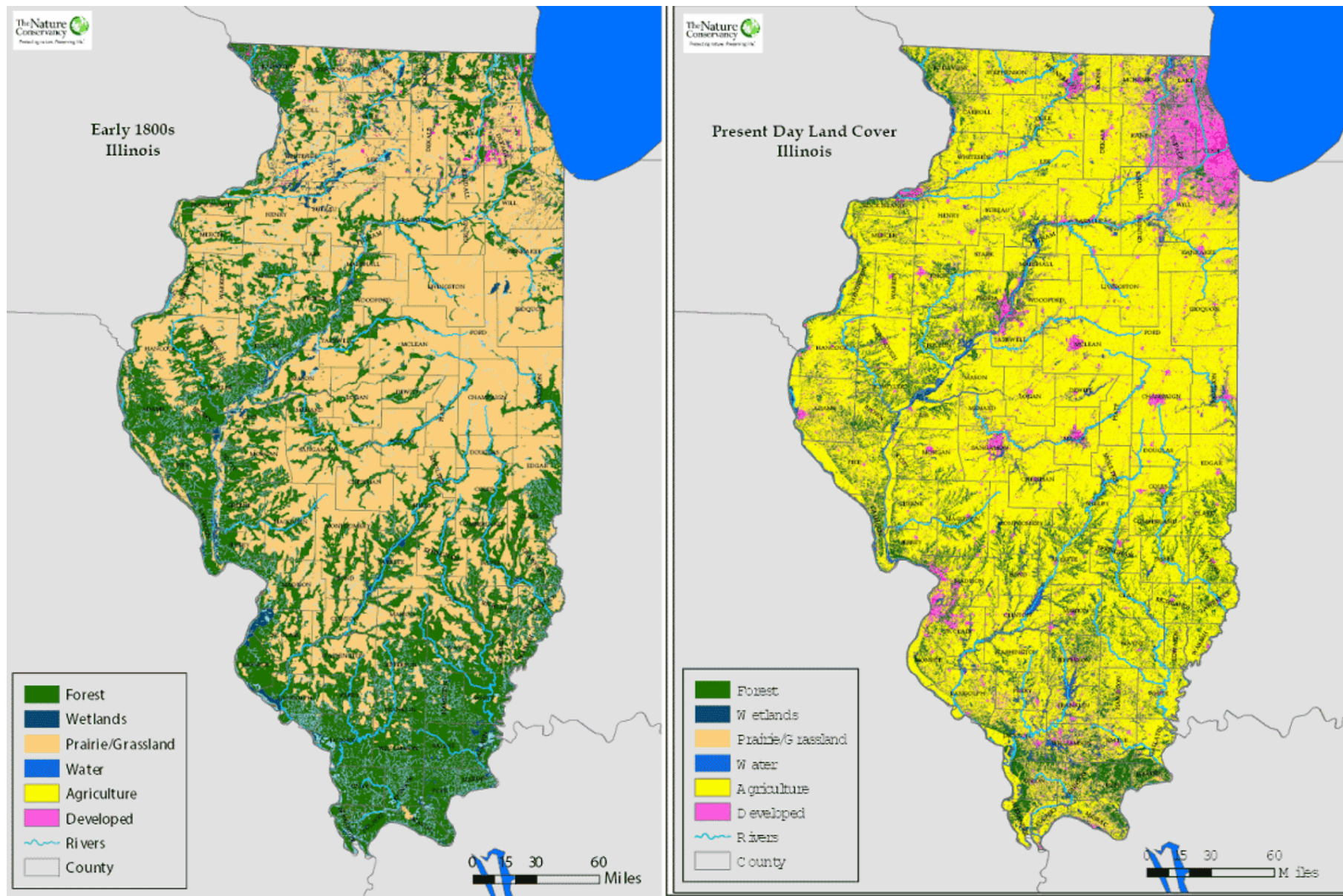


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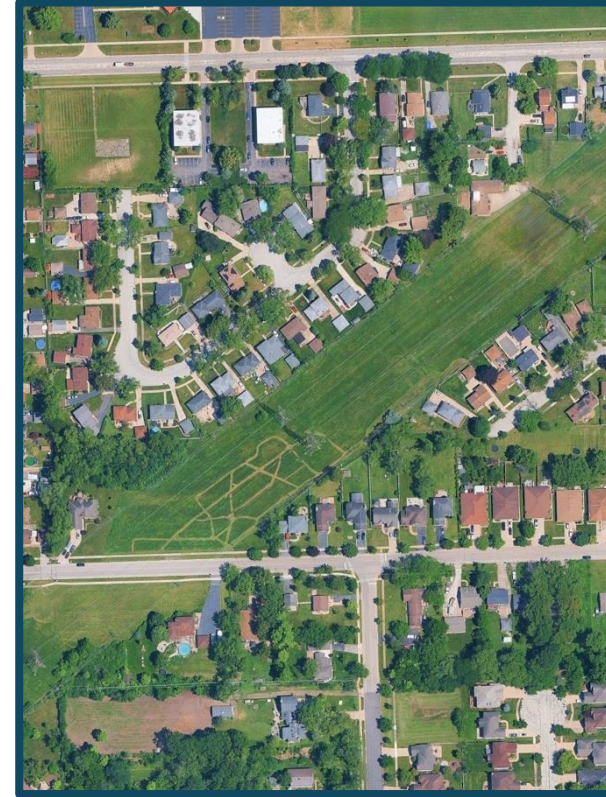
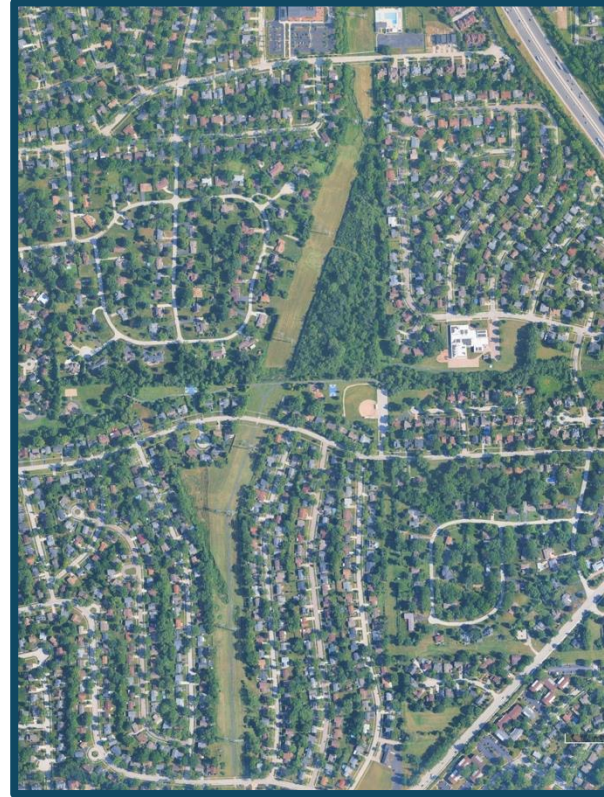
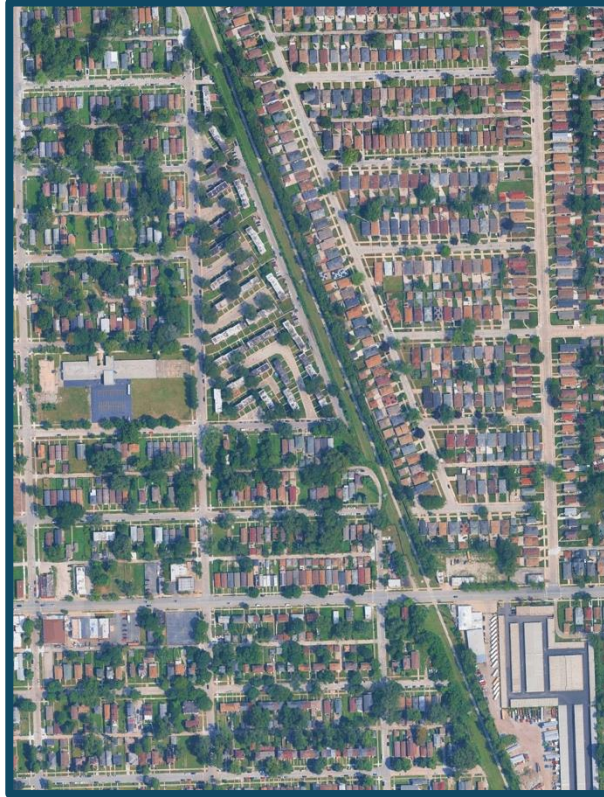
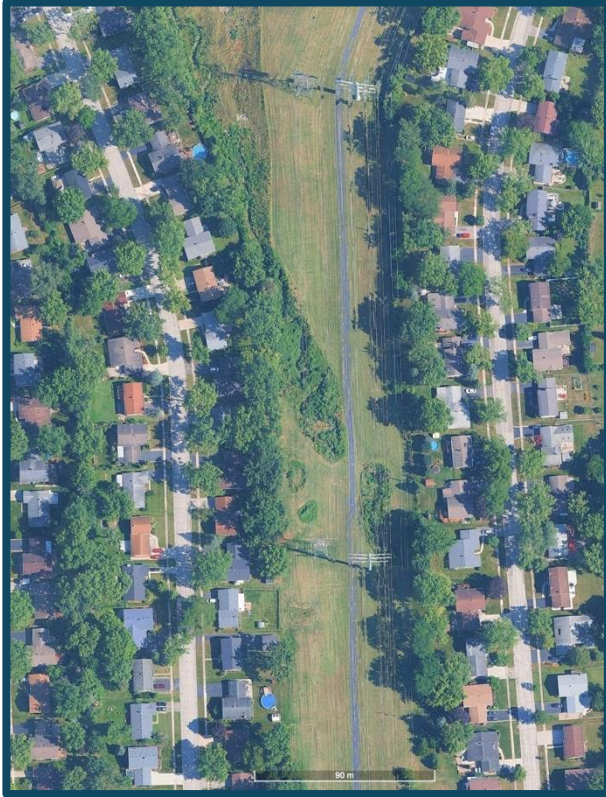
- One of the largest landowners in Illinois, USA
- >56,000 acres of ROW corridors (22,662 ha)
- 550 acres of prairie ROWs (>222 ha)



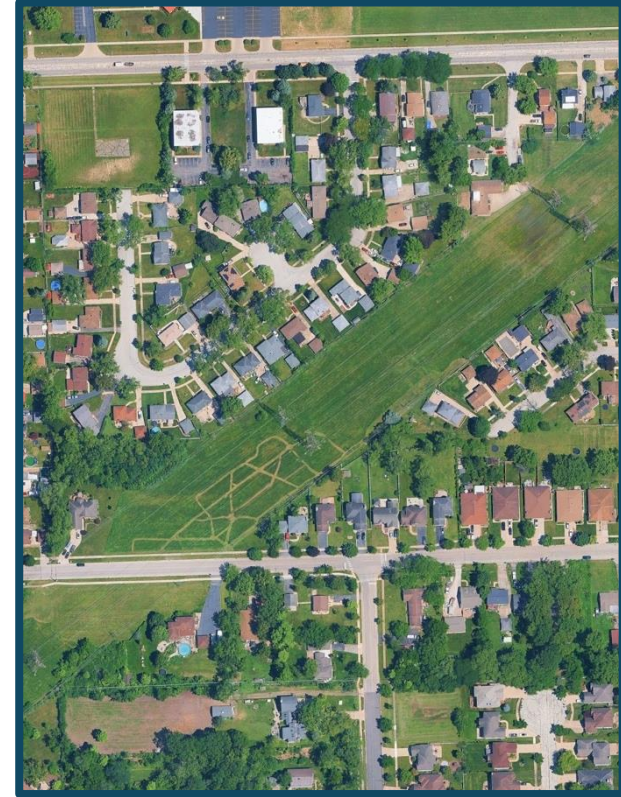
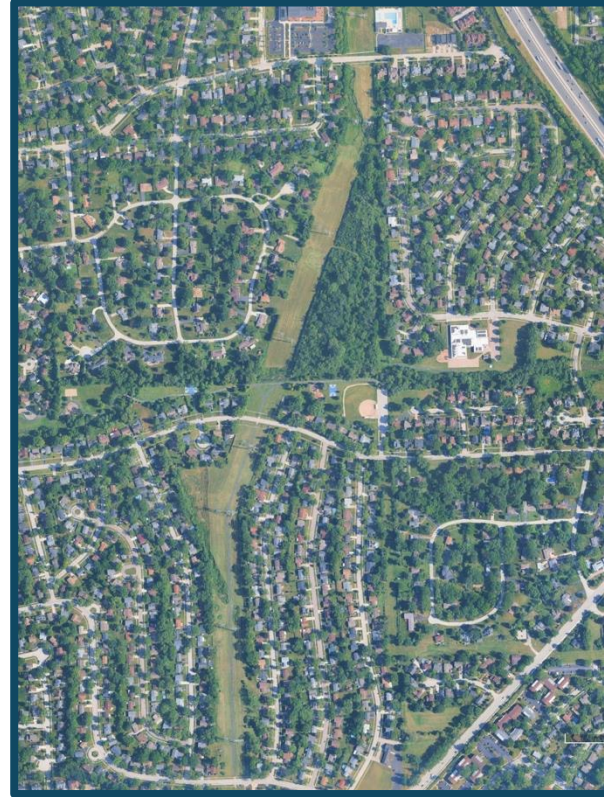
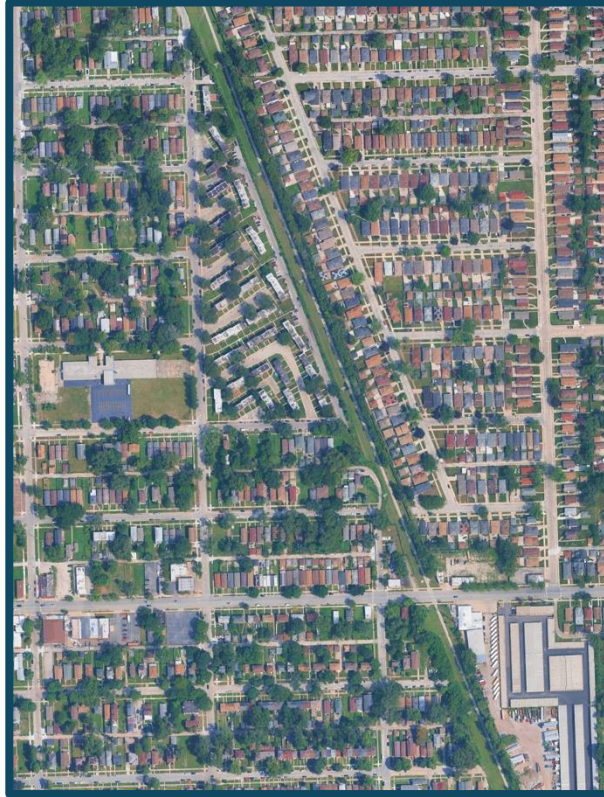
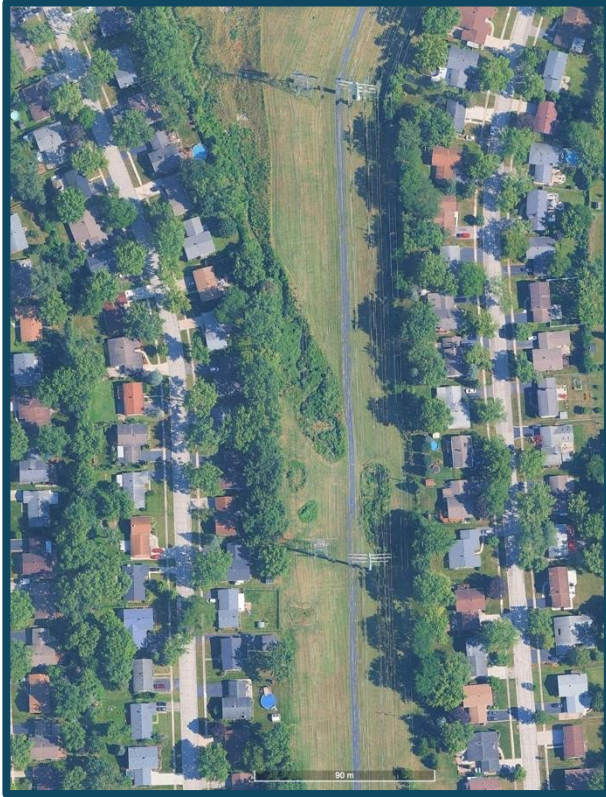
< 0.01% of original tallgrass prairie remains in Illinois



ROWs are a source of greenspace in residential landscapes



ROWs are a source of greenspace in residential landscapes



What ecosystem services do they provide?

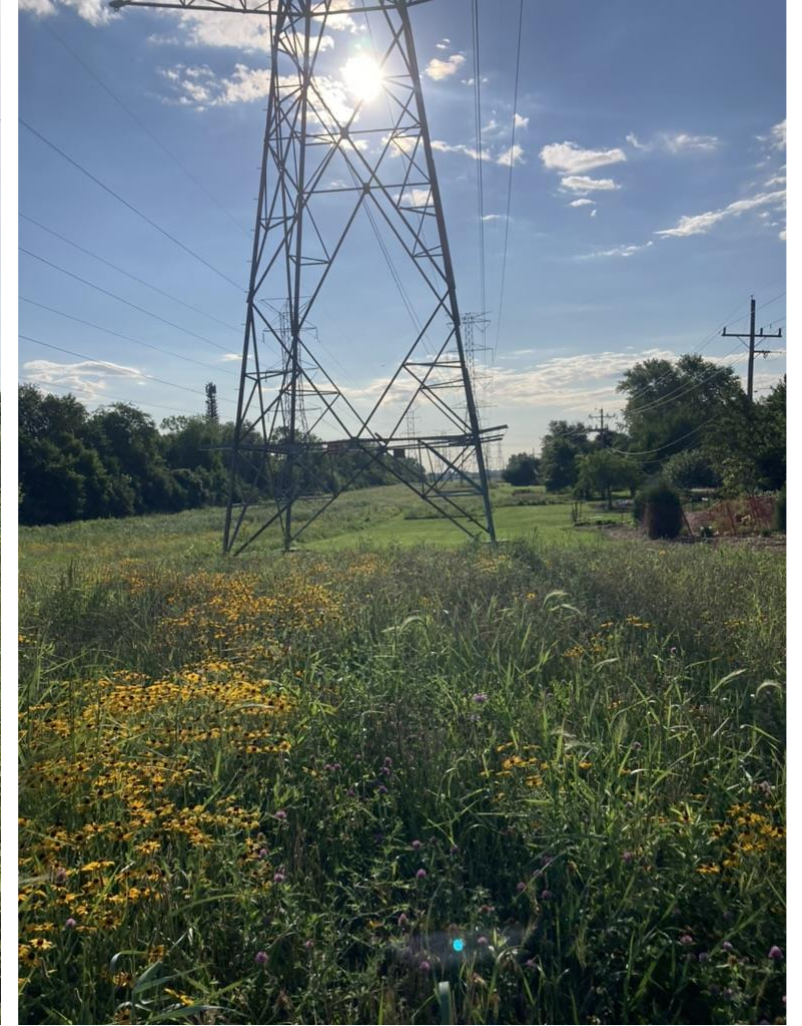
ROW Vegetation Management



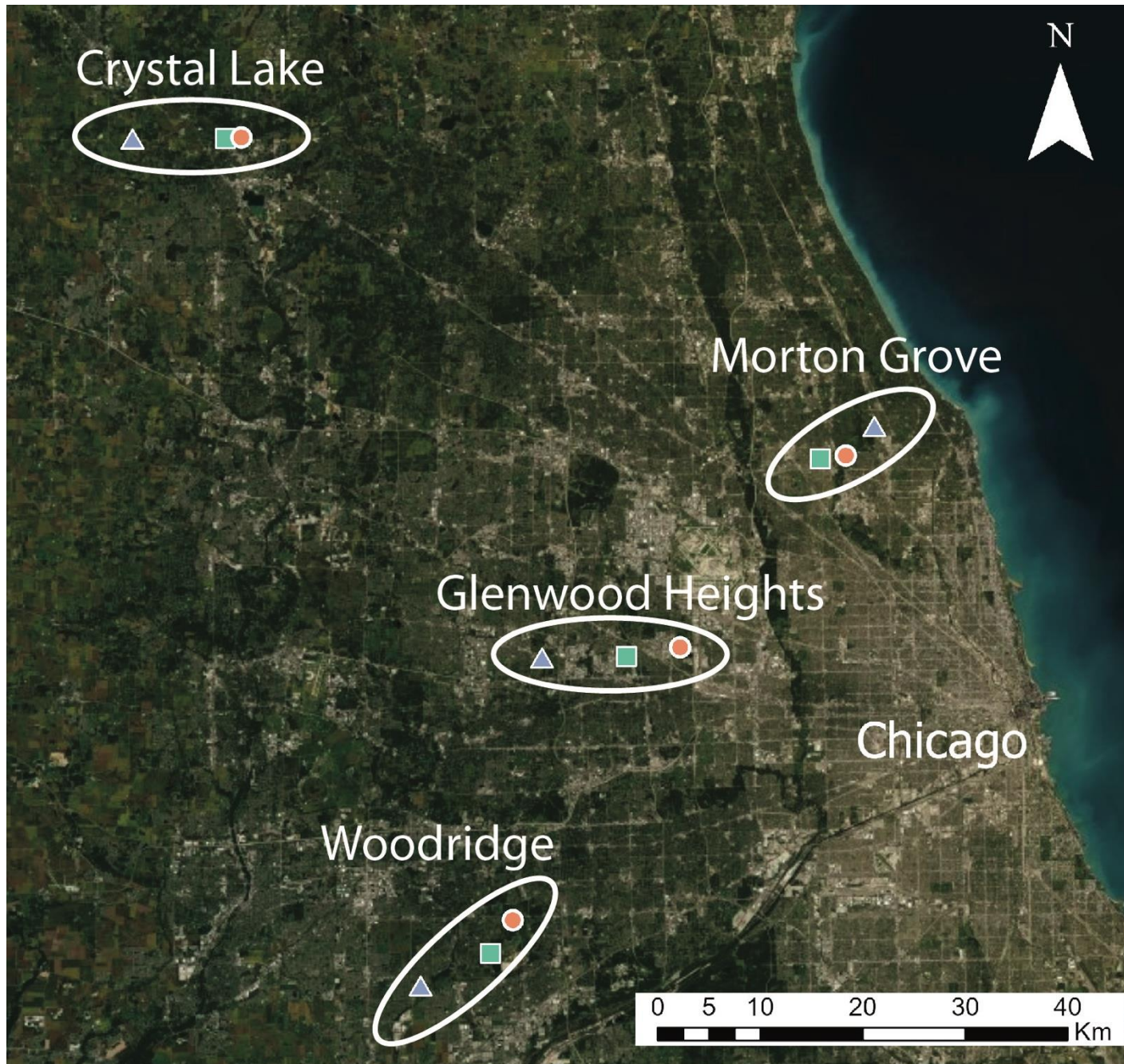
Mown



Old-Field



Prairie



Study Design

- 3 Management types
- 4 Locations
- $3 \times 4 = 12$ ROW corridors
- All residential

How Does ROW Management type affect biodiversity?



Birds



Pollinating
Insects



Plants

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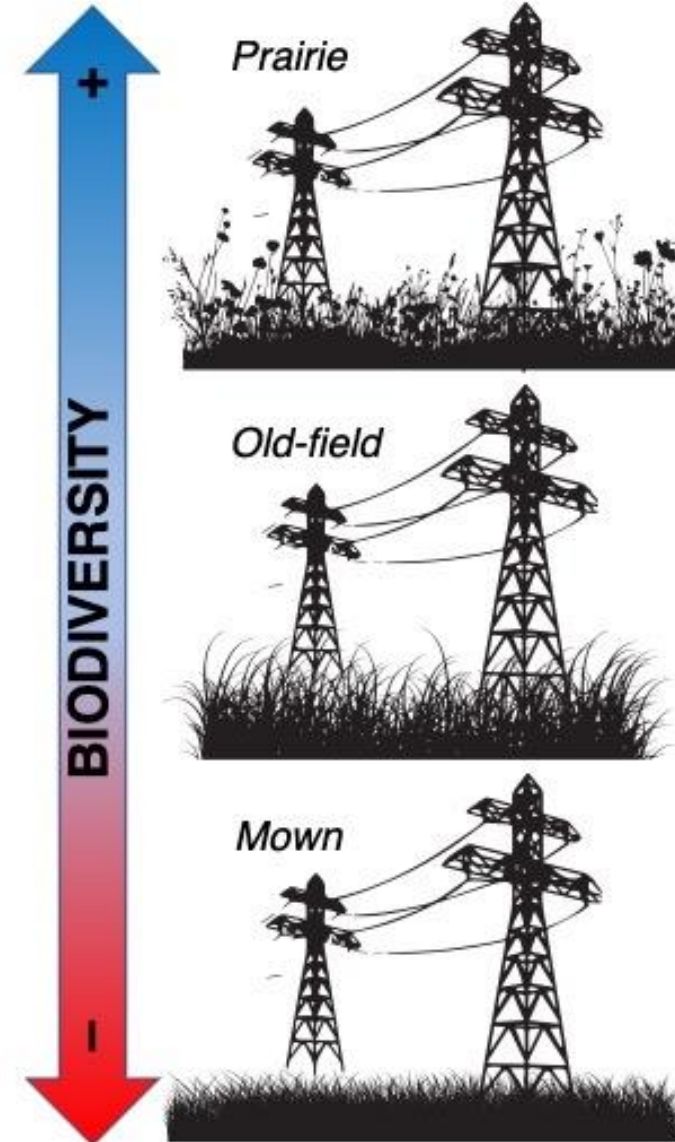
Birds



Pollinating
Insects



Plants



How Does ROW Management type affect biodiversity?

Powerline Corridors Can Add Ecological Value to Suburban Landscapes When Not Maintained as Lawn

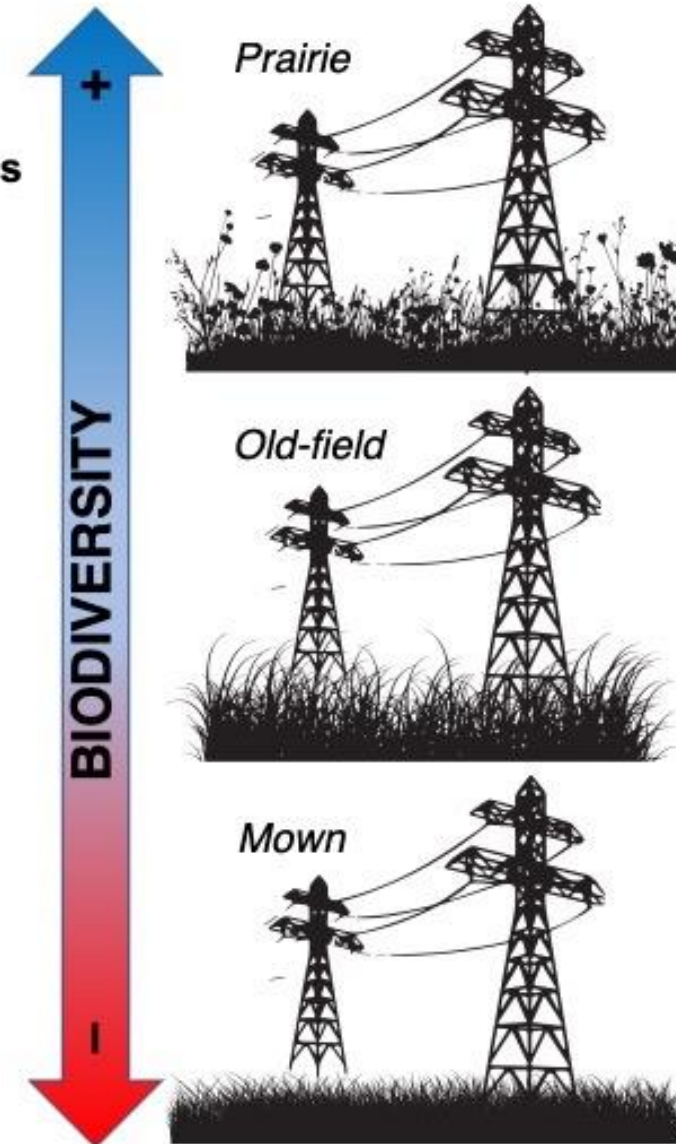
by Megan Garfinkel ^{1,*} , Sheryl Hosler ¹ , Christopher Whelan ^{1,2}  and Emily Minor ¹ 

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How does ROW management affect cultural ecosystem services?



Survey Study Design

1. How do you use the ROW?
2. Feelings about the ROW (services and disservices)
3. General feelings about nature
4. Estimate the biodiversity (birds, pollinators, plants) in the ROW
5. Open ended questions
6. Demographics

Balancing the management of powerline right-of-way corridors for humans and nature



Survey Study Design

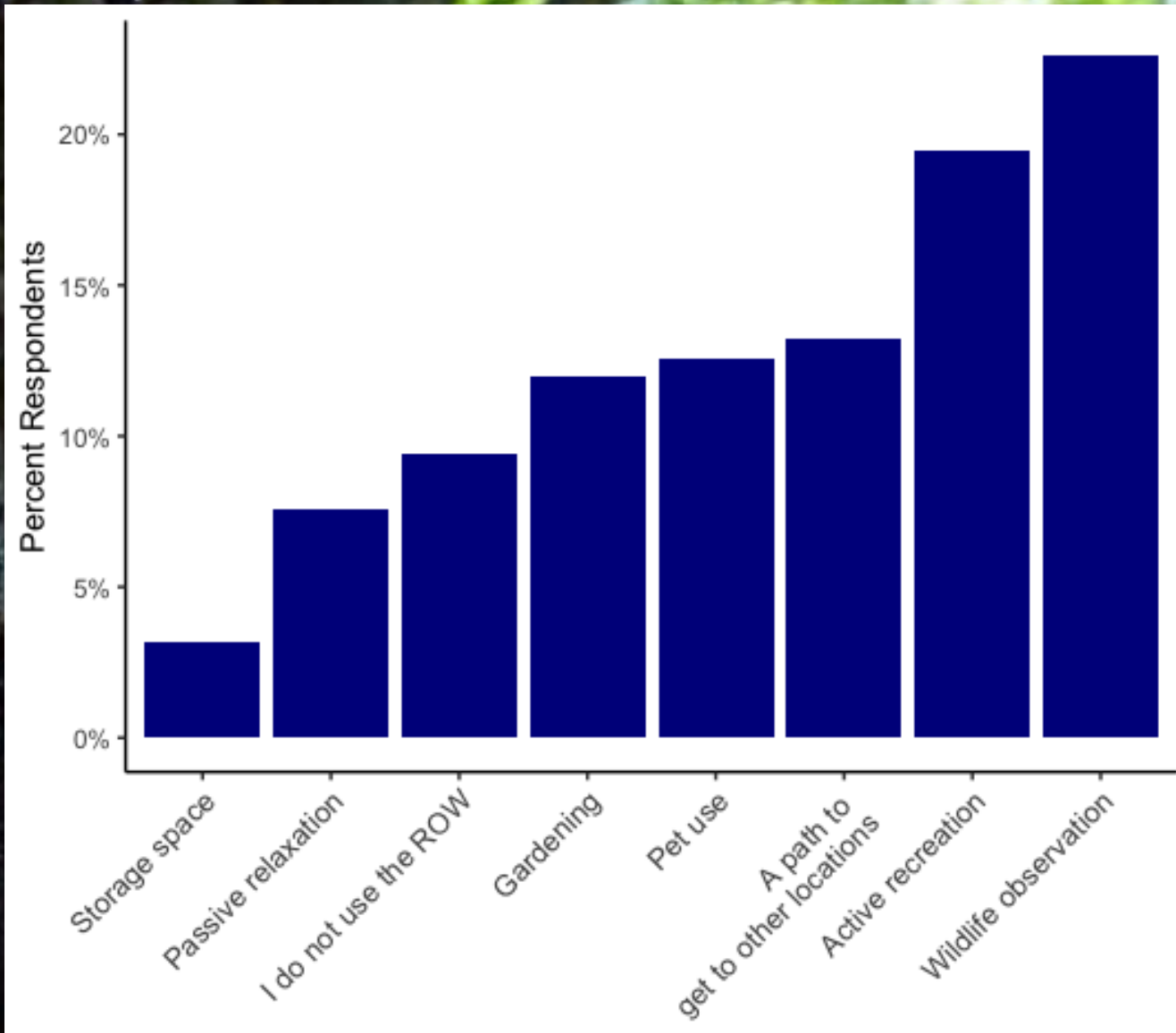
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- Surveys distributed to 212 households
- Online or in person
- 70 complete or partially complete surveys
- 31% completion rate

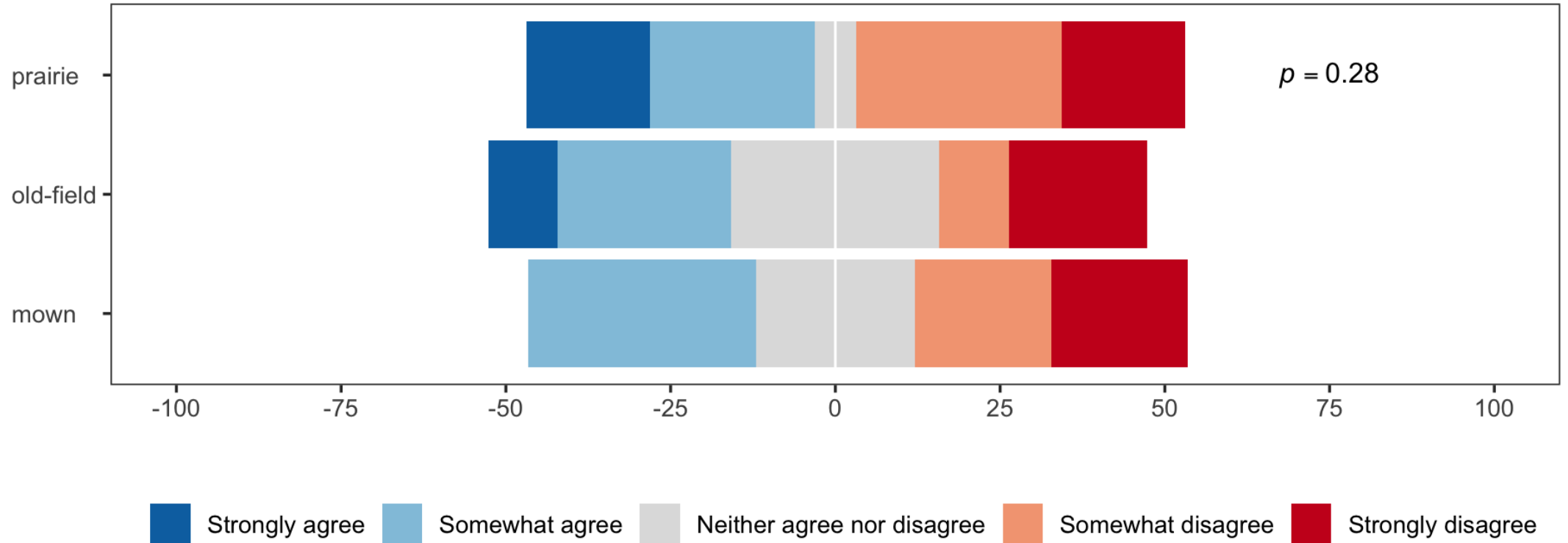
Balancing the management of powerline right-of-way corridors for humans and nature



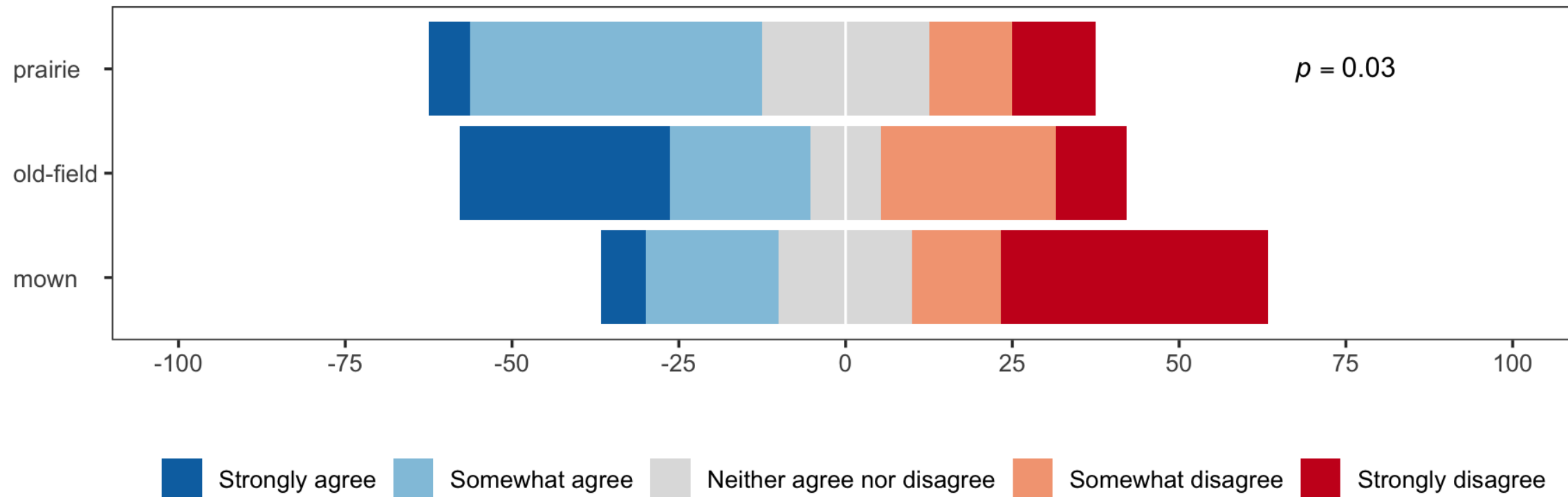
How do residents use the ROW?



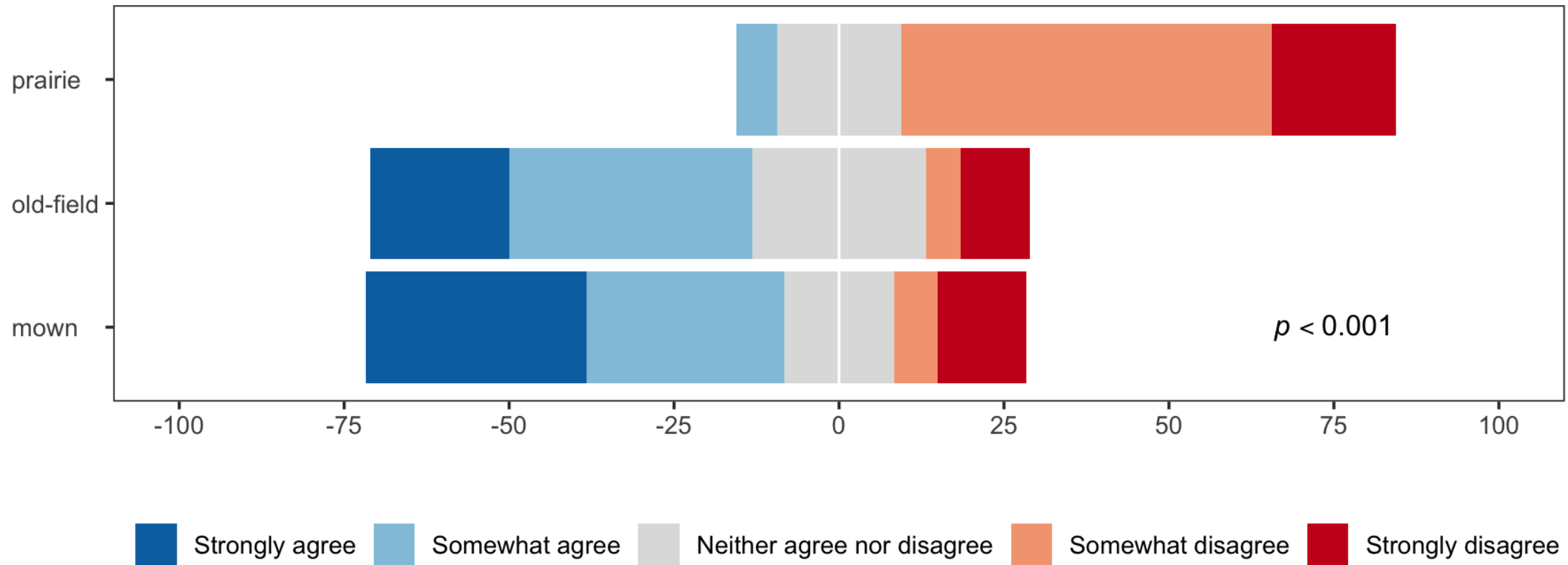
I am happy with the way ComEd
maintains vegetation in the ROW by my house



The ROW is aesthetically pleasing or attractive



Tall grass and vegetation looks untidy in a ROW







Key Findings

- Most respondents believe it is important that the ROW provides habitat for wildlife
- Wildlife observation most frequently reported activity in the ROW
- Management category did not affect probability of formal complaints
- Residents near mown ROW significantly less likely to find the ROW attractive

- Managing for human enjoyment is compatible with managing for biodiversity
- Managing for biodiversity can *enhance* cultural services in residential ROW



Acknowledgements



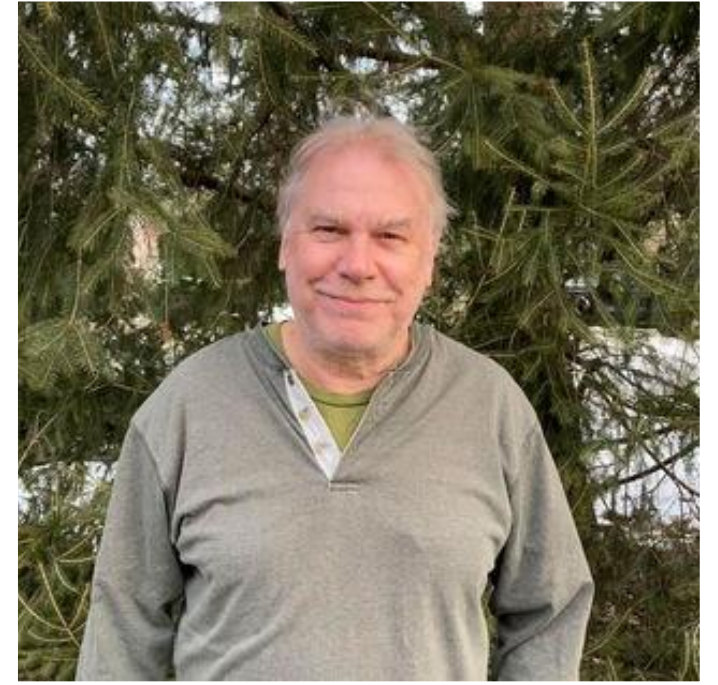
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