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Why be a TreeKeeper?

Results of a survey on the involvement and continued engagement of
volunteer urban forestry stewards in Chicago

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What is the Anthropocene?

The **Anthropocene** is *a new geologic epoch characterized by dramatically increased and increasing human use of materials and natural resources and expulsion of waste/pollution into the environment*. Earth systems and **sustainability science** research over the past decade or two has revealed that human activities are the single, dominant driver of major Earth processes. **Human impacts on the environment** include:

- Land use change and deforestation
- Biodiversity loss (incl. species extinctions)
- Biogeochemical flows (such as nitrogen and phosphorous used in fertilizers)
- Freshwater use, and
- Climate change.

Because of these and other changes in our environment, in the Anthropocene, human societies will have to work harder to meet our basic needs and make life comfortable for all living things on the planet.



The skyline of Atlanta, Georgia, one of the most sprawling metros in the U.S.

Why be a TreeKeeper?

Research Objective

**To better understand motivations and barriers
that impact volunteerism in the urban forest**

Manuscript Coming Soon

- Manuscript in progress: **“Why be a TreeKeeper? Results of a survey on the involvement and continued engagement of volunteer urban forestry stewards in Chicago”**
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Presentation Outline

 Introduction

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Program Background



Openlands

“Founded in 1963, Openlands protects the natural and open spaces of northeastern Illinois and the surrounding region to ensure cleaner air and water, protect natural habitats and wildlife, and help balance and enrich our lives.”

TreeKeepers – est. 1990

- Six-week certification program training Urban Forest volunteers
- Certified TreeKeepers can continue involvement through TK run tree care events.
 - Planting, pruning, and mulching events

Early Research on TreeKeepers

“Why Trees?” An Exploration of Urban Forestry Volunteers’ Values and Motivations

By Lynne M. Westphal (1992)

- Volunteer values of trees as motivations
- Pre- and post TreeKeepers class survey
- Top 5 values of trees: ‘Brings nature closer’, ‘Pleasing to eye’, ‘Good for the environment’, ‘Provides shade’, ‘Provides spiritual values’

Why be a TreeKeeper?

Research Questions

- ❖ Why and how do individuals become *initially involved* with the TreeKeeper certification program?
- ❖ Once individuals are TreeKeepers, what are their motivations for and barriers to *continued engagement* with the program?

Research on Volunteerism:

Volunteer Process Model

Antecedents
– prior
motivations

Experience –
of
volunteering

Consequence
– outcome of
the
volunteering

Snyder & Omoto (2008)

Levels of Analysis	Stages of the Volunteer Process		
	Antecedents	Experiences	Consequences
Individual	Personality, motivation, life circumstances	Satisfaction, stigma, organizational integration	Knowledge and attitude change, health
Interpersonal/ Social Group	Group memberships, norms	Helping relationship, collective esteem	Composition of social network, relationship development
Agency/ Organization	Recruitment strategies, training	Organizational culture, volunteer placement	Volunteer retention, work evaluation
Societal/Cultural Context	Ideology, service programs and institutions	Service provision, program development	Social capital, economic savings

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Email Survey of TreeKeepers

Questionnaire Content

- 45 open & close-ended questions
- Survey length 20-30 minutes
- Questions topics:
 - Environmental + Tree Knowledge
 - Volunteer Motivations + Barriers
 - Volunteer History

Survey Administration

- Qualtrics survey software
- Emailed 1,170 current and past TreeKeepers
- Four email invitations were sent over the course of one month (Dillman method)
- **332 responses: 28% response rate**

See a copy of our survey at www.lufa-depaul.org/treekeepers

Survey Analysis

- Results were downloaded to Microsoft Excel to be cleaned and analyzed.

Open-ended Question Coding

- Each open-ended was coded separately
- Emergent coding was most generally used to look for themes in responses
- A priori scheme was sometimes used during the second cycle coding

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Who are TreeKeepers?

Age	
21-30	7%
31-40	13%
41-50	14%
51-60	19%
61-70	33%
71+	15%

Gender	
Female	63%
Male	36%
Other	1%

Survey respondents are older, female, White, highly educated

Race / Ethnicity	
White	79%
Other	9%
African American	6%
Hispanic/Latina/o/x	4%
Asian American	1%
Native American	1%

Level of Education	
Post graduate degree	47%
College graduate	30%
Some graduate training	11%
Some college or technical training	10%
High school or GED equivalent	2%
Less than high school	<1%

Percents may not add to 100 due to rounding

General Volunteerism of TreeKeepers

- 81% of respondents involved in other organizations
- 45% of respondents stated there are other urban forestry organizations
- Top four listed organizations:
 - Forest Preserve District or Friends of the Forest Preserve group (21%)
 - A garden club or similar (20%)
 - Friends of Parks (Chicago Parks District), or other park groups (19%)
 - A neighborhood environmental group (18%)

TreeKeeper Involvement

When was the last TreeKeepers event you participated in?	Percent
Within past 6 months	36%
Within past 1-2 years	28%
Within past 3-5 years	12%
Within past 6-10 years	11%
Over 10 years	7%
Unknown	7%

Percents may not add to 100 due to rounding

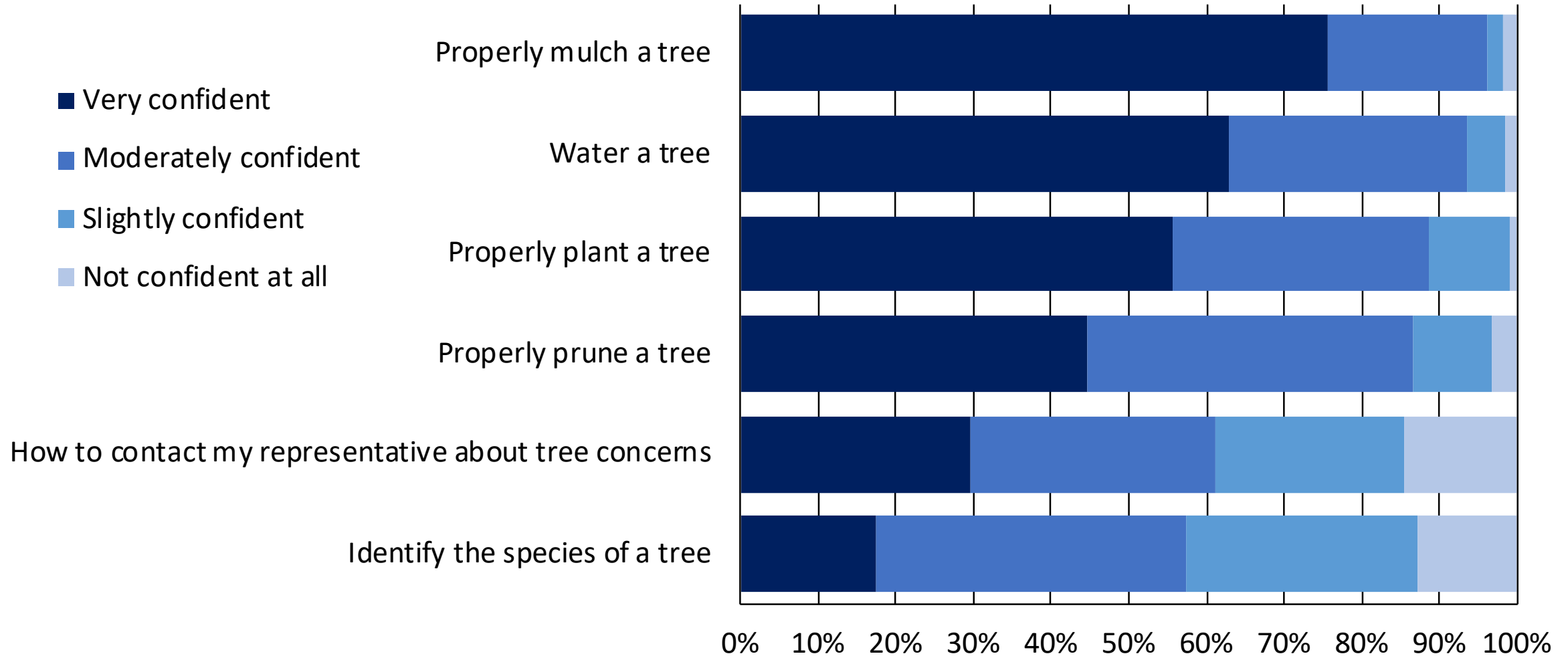
Volunteer Activities

What TreeKeepers activities do you participate in?	All survey respondents (n=324)
<i>I am currently not active in any TreeKeeper activities</i>	47%
Pruning	38%
Planting	34%
Mulching	31%
Inventory/Adopting a park	14%
Watering	12%
Advocating (for example, contacting a representative)	11%
Teaching	7%
Other	8%

Volunteer Activities

What TreeKeepers activities do you participate in?	All survey respondents (n=324)	<u>Still-involved</u> TreeKeepers (n=174)
<i>I am currently not active in any TreeKeeper activities</i>	47%	19%
Pruning	38%	59%
Planting	34%	56%
Mulching	31%	52%
Inventory/Adopting a park	14%	24%
Watering	12%	17%
Advocating (for example, contacting a representative)	11%	16%
Teaching	7%	11%
Other	8%	8%

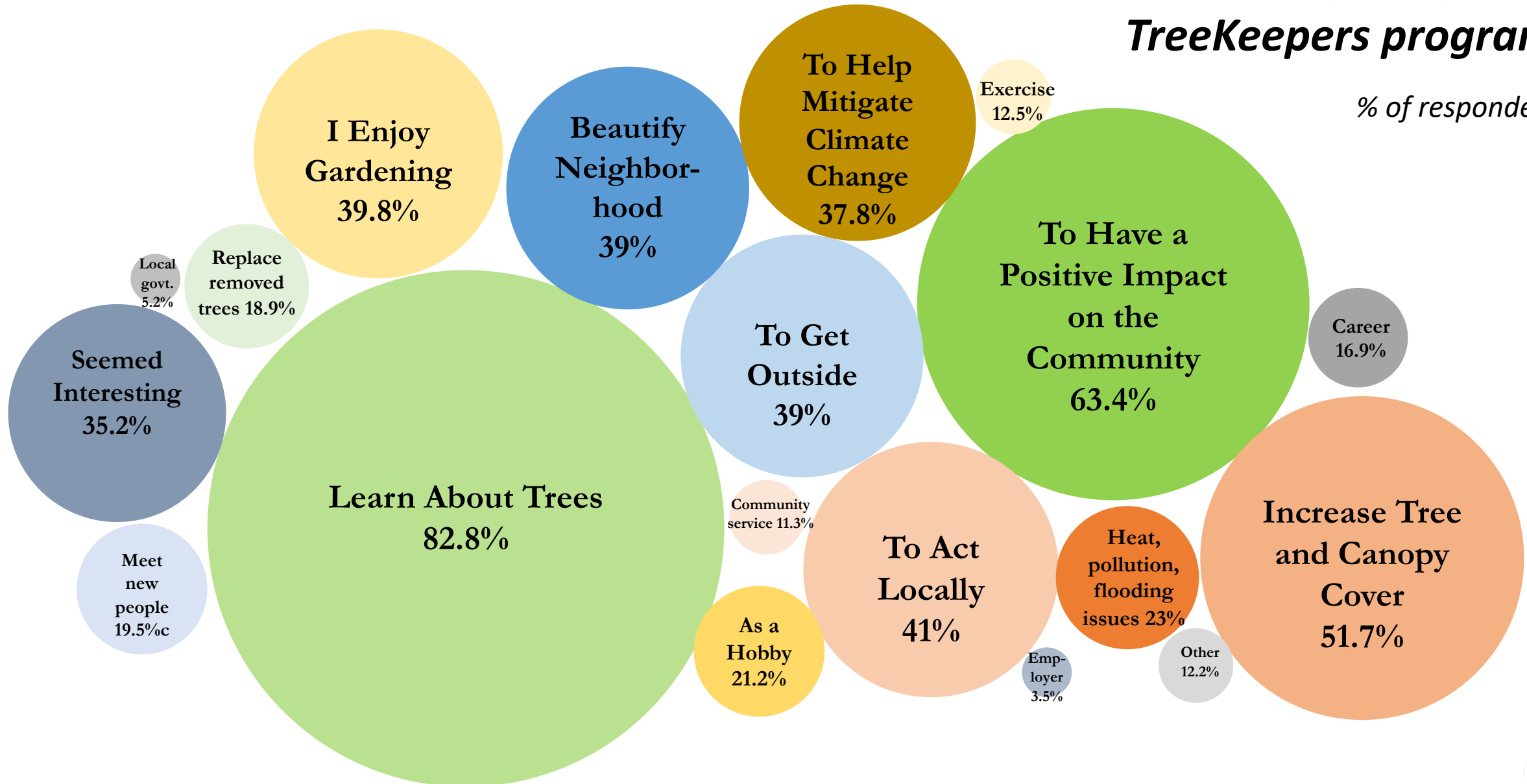
Respondent Confidence in TreeKeeper Activities



Initial Motivations

Why did you sign up for the TreeKeepers program?

% of respondents

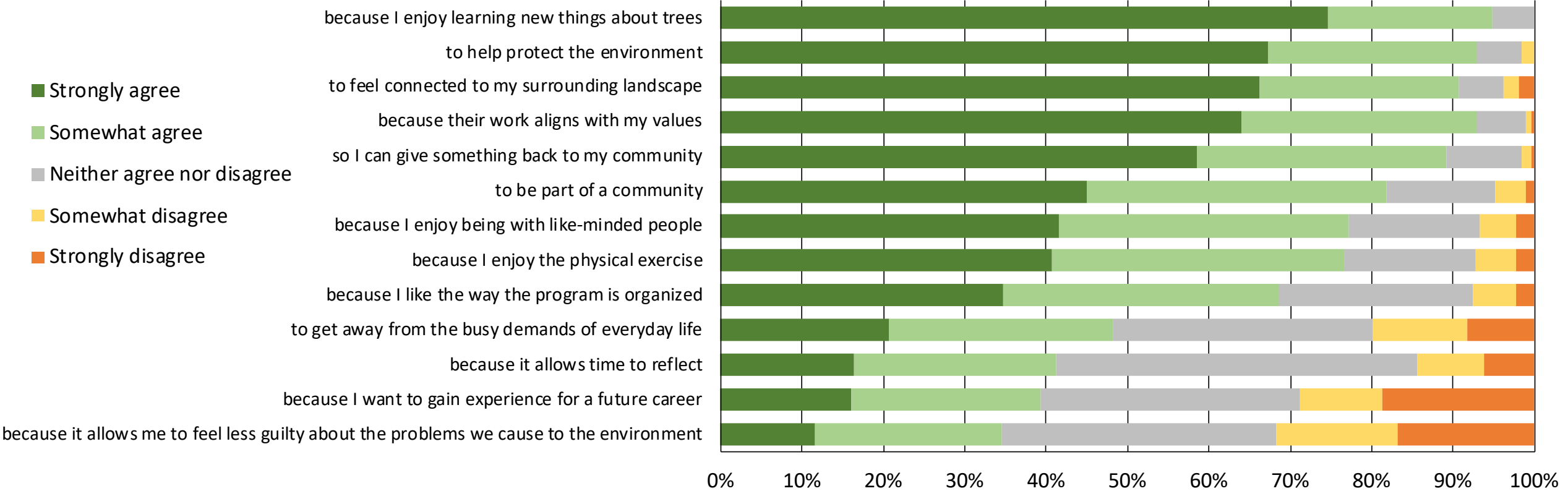


Motivations for Continued Involvement

N=292

I volunteer with TreeKeepers...

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree



Open-ended Motivations*

*In survey, appeared before list of motivators
w agree-disagree response options

Motivations	Antecedents	Experiences	Consequences
Personal	<ul style="list-style-type: none"> •Doing a good thing: 15 •<i>Fulfilling individual values:</i> 8 	<ul style="list-style-type: none"> •Being outdoors—exercise and valuing time in nature: 19 •Prospective career enhancement, obligation, or networking: 10 	<ul style="list-style-type: none"> •Causes gratification, enjoyment, and other positive emotions: 22 •Fulfilling a personal environmental goal: 3 •General motivation and/or self-improvement: 5 •<i>Fulfilling individual values:</i> 8
Community		<ul style="list-style-type: none"> •A specific person: 4 •Engage the public: 6 •Being with people: 15 •Interact with the TreeKeeper community: 35 	<ul style="list-style-type: none"> •Help the community: 20
Program Based	<ul style="list-style-type: none"> •The organization: 17 	<ul style="list-style-type: none"> •The program's structure: 25 •Seeing new places: 3 •Convenience: 2 	
Environmental	<ul style="list-style-type: none"> •Individuals like nature and/or trees: 30 •Individuals want to learn about trees: 21 	<ul style="list-style-type: none"> •Applying skills and knowledge: 3 	<ul style="list-style-type: none"> •Support the environment: 48 •Support the Urban Forest: 50 •Trees for Trees Sake: 7

Reported Benefits & Drawbacks of Urban Trees

Greatest benefits of trees (n=258)	Count
Carbon sequestration	185
Beautification	156
Provides wildlife habitat	136
Provides shade	111
Water absorption	100
Cooling urban heat islands	79
Photosynthesis	68
Soil stability	39
Environmental benefits	33
Psychological benefits	30
Creates sense of community	26
Food source	25
Increase property value	19
Combat climate change	19
Energy conservation	18
Health benefits	16
Provides comfort	16
Crime reduction	14
Biodiversity	12
Ecological services	12
Improve quality of life	11
Weather barrier	10
Other	97
Total	1232

Drawbacks of trees (n=220)	Count
Property damage	142
Leaf and seed clean-up	94
Requires maintenance/upkeep/time	66
Did not answer	38
Safety issues	32
Maintenance costs	29
Hazardous branches	28
Attracts insects/rodents	26
Initial planting/tree cost	23
Planting issues	23
Impede landscape planning	21
Invasive species	18
Tree removal	14
General misconception of trees	13
Too much shade	11
Prone to disease	11
Other	68
Total	657

Barriers to Involvement

“Agree” indicates a barrier

Physical or mobility issues prevent me from attending TreeKeepers events.

Lack of transportation prevents me from attending TreeKeepers events.

A busy work week prevents me from going to TreeKeepers events.

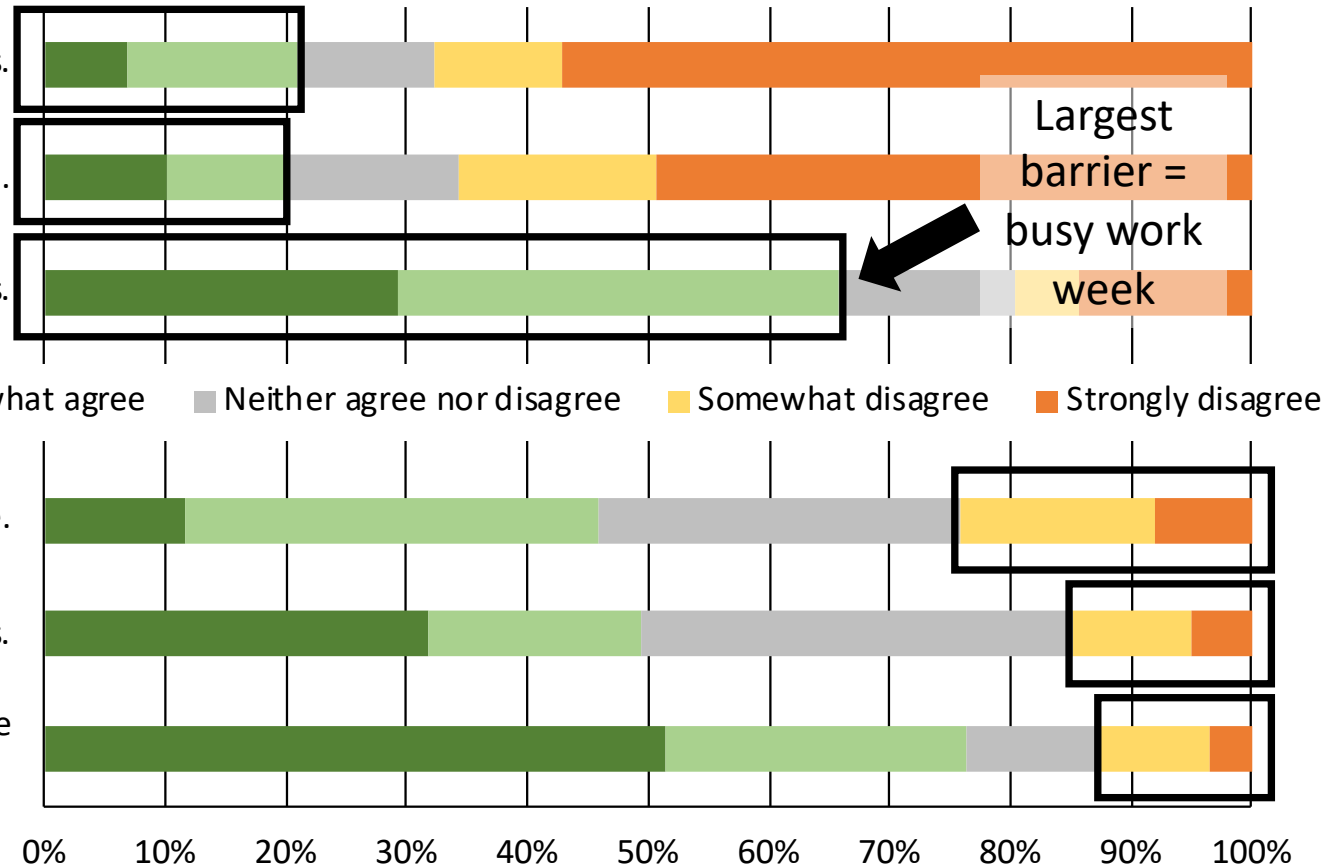
Strongly agree Somewhat agree Neither agree nor disagree Somewhat disagree Strongly disagree

TreeKeepers events are generally at a time of day that is convenient for me.

I feel comfortable bringing my kids to TreeKeepers events.

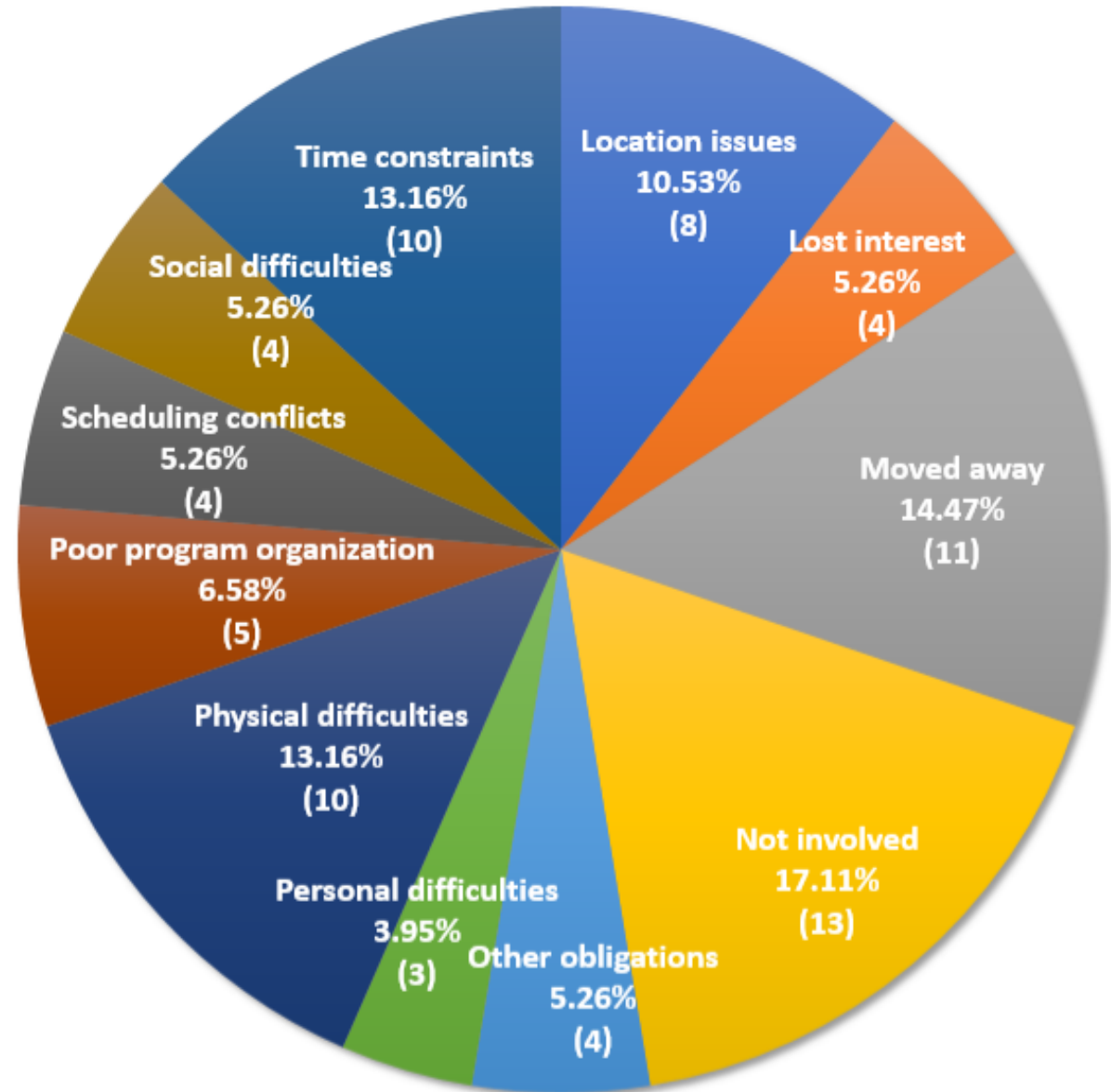
It is easy for me to find out when and where TreeKeepers events are happening.

“Disagree” indicates a barrier



Open-ended Barriers

- 83 respondents reported either not being involved as frequently as they would like or terminating their involvement completely
 - 76 respondents reported specific barriers to involvement →
- 55% (148) of respondents either strongly or somewhat agree with the statement: *A busy work week prevents be from going to TreeKeepers events*



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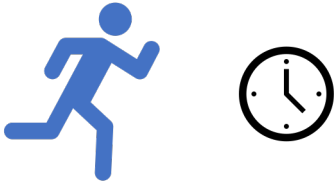


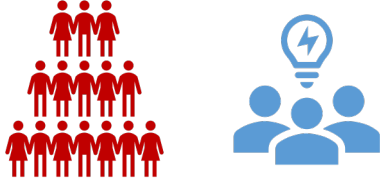





Results

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Discussion

Volunteer Process Model can help understand the dimensions of volunteering in urban forestry & environmental stewardship.

	Antecedents	Experiences	Consequences
Individual			
Interpersonal/ Community			
Organizational			
<i>Environmental (new)</i>			

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Implications for urban forest practice

- We need more research on volunteers in urban forestry
 - Understanding who volunteers are can help understand where there are gaps in who volunteers
- Why so White? A lot of existing research also finds volunteers are mostly White people...
 - How can urban forestry be more inclusive and welcoming to *increase diversity*?
 - Openlands' already working on this: pursuing Spanish TreeKeepers' instruction, among other things
- Continued involvement: Approx. half respondents “still involved”
 - Involvement may mean different things to different people
- Motivations: capitalize on value-alignment & community orientation

Questions?

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