Background

- By increasing the urban tree canopy Canadian cities can protect citizens against climate impacts (Eyquem & Feltmate, 2022) and provide many human health and environmental cobenefits (Wolf et al., 2020)
- Cities are harsh growing environments, and growing a mature tree canopy can take many years, leaving the community vulnerable to increasing climate impacts (Pörtner et al., 2022).
- Planting mini-forests in small spaces or parks may rapidly increase biodiverse green space in urban areas (Lewis, 2022).

Understanding what factors lead people to engage in this initiative could help communities foster plantings, possibly as citizen-led climate action.

Results

- Some participants planted strategically as part of a community climate action plan.
- Participant's climate concerns included drought, wildfire, smoke, hurricanes and floods impacting humans and ecosystems.
- Participants expressed concern for biodiversity and the urban tree canopy.
- Participants are adapting mini-forests to suit funding, different urban environments and changing climate.
- Participants feel a sense of urgency to take action.
- Not-for-profits planted mini-forests with or without city support innovating solutions to barriers and challenges.
- Several participants spoke about reconciliation.
- Participants feel they are part of a movement extending beyond their community.
- Participants feel that the ecological and social impact goes well beyond the footprint of the mini-forest.

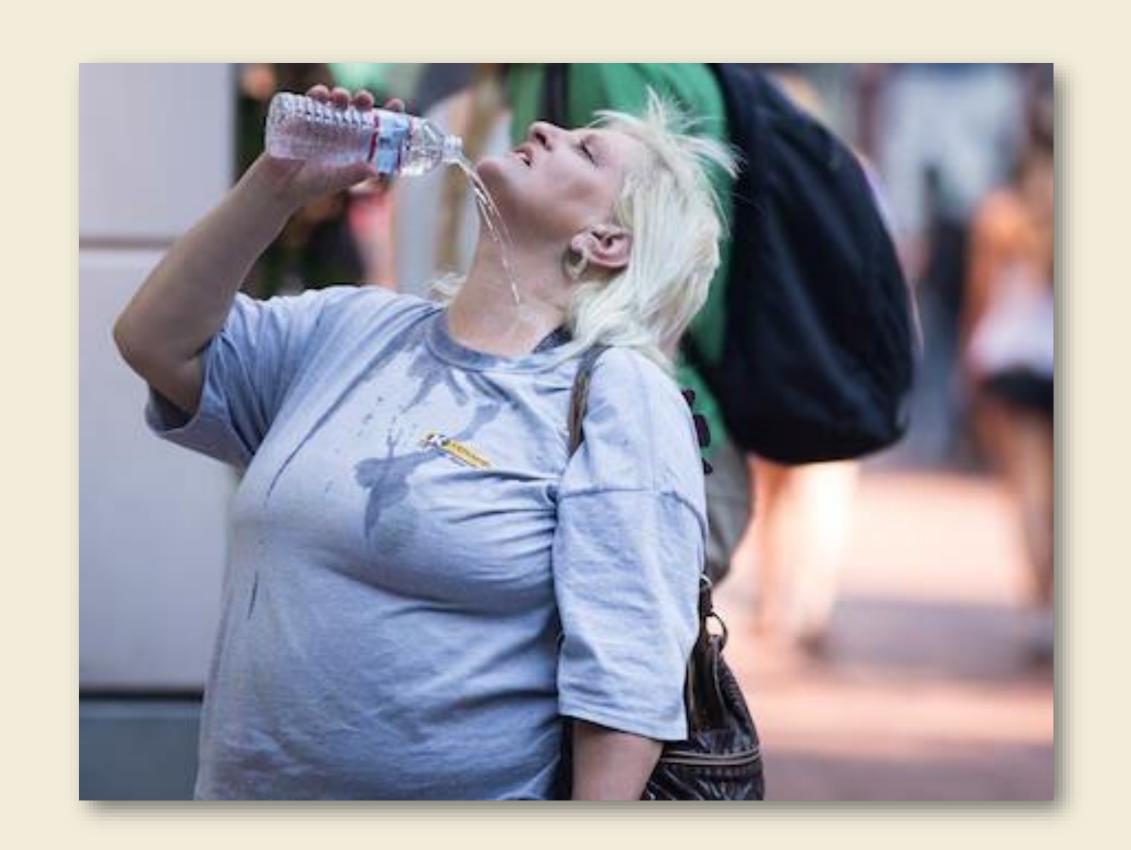
Method

- Qualitative study looking for insights and understanding.
- 7 from not-for-profits, 4 were volunteers & 2 city employees.
- 9 participants from 4 provinces were interviewed.
- 36 mini-forests planted between 2021 and 2024.
- Interviews were coded using thematic analysis to find themes that answered the research questions.

Climate-concerned Canadians plant mini-forests to transform their cities, each other and the world.



"We have to do something about heat islands. We can't just say, sorry, it was a grassland, so you don't get trees" (P0708).



"At a personal level and then in urban environments the urban heat island effect is a serious issue....let's plant more trees because we're going to have more extreme weather" (P0716).



"We saw it as an **urban solution to** the loss, significant **loss of ecology** or habitat in not just our community but **in every community, everywhere**" (P0612).



"Getting people involved in relation to miniforests...transcends people who even know what it is into people who want to learn more and get excited and...be involved with it" (P0705).

Presenter: Deanna Fourt, Thesis for MACAL, Nov. 20, 2024

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Azin Ghaffari, June 11, 2023, Postmedia. https://calgaryherald.com/news/local-news/calgary-back-under-air-quality-warning-as-smoke-rolls-in. © 2024 Calgary Herald, a division of Postmedia Network Inc. 365 Bloor St. East, Toronto, ON, M4W3L4.



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