



Cultivating Science

Examining the Free-Choice Science Learning Networks of Urban Gardeners

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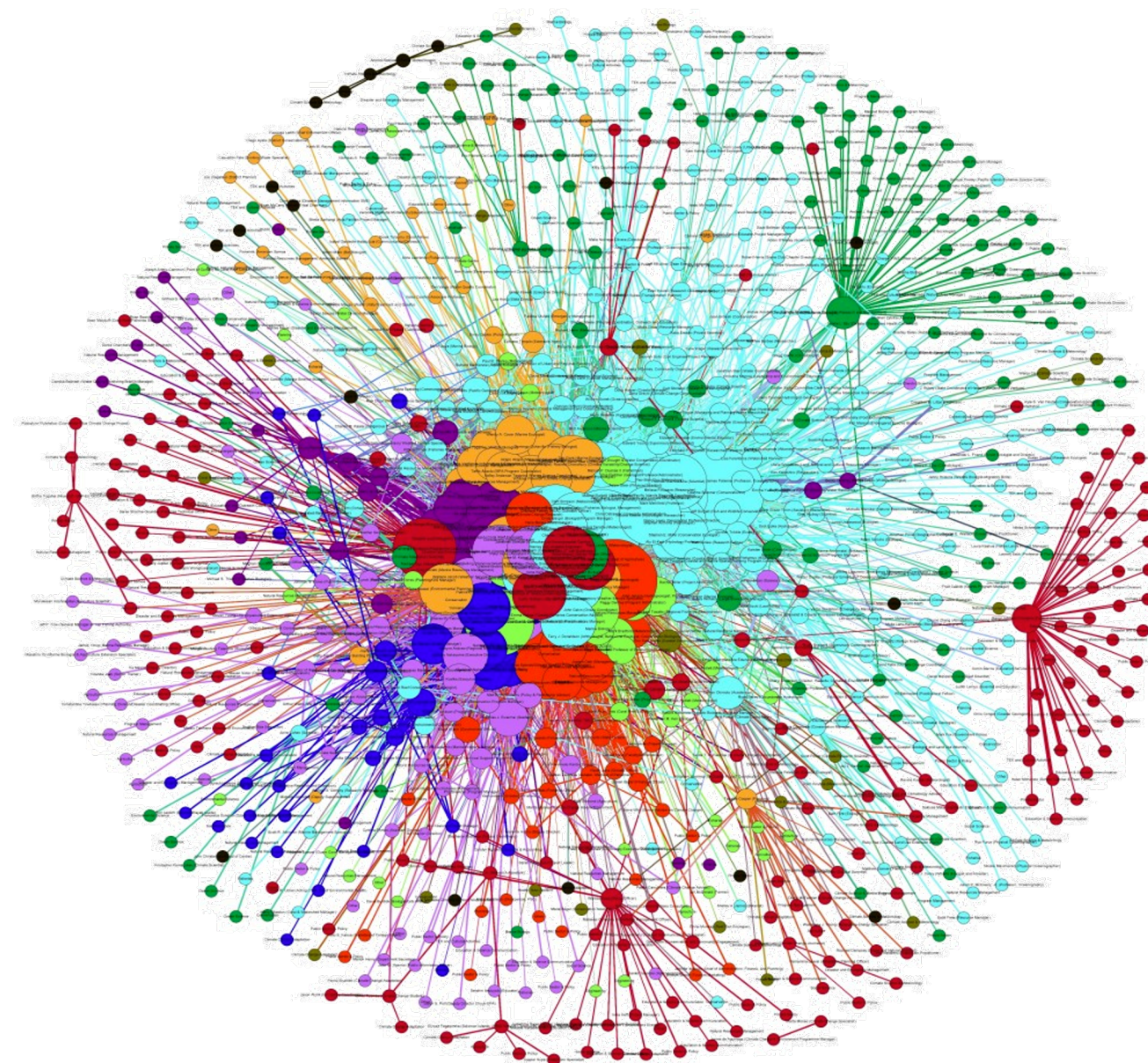
What We Hope to Learn

Free-choice learning occurs when individuals make choices about what, where, how, and who they participate with in their self-motivated learning activities. This project explores how different people, living in the same geographic region, make plants and gardening a part of their lives. We explore **how** adult community members choose to participate in their plant and gardening interests, including: the topics and activities that interest them, with **whom** they participate, **where**, and **which resources** they access. This work will provide a clearer understanding of a community's STEM ecosystem and will build evidence-based understanding about who is being served by which resources in their community. We are also piloting a methodology to use participants' social networks to collect data from diverse (age, gender, race, socioeconomics) urban gardeners who have often been excluded by more traditional data collection efforts.

How: Social Network Analysis

Social Network Analysis is the theory and process of **understanding specific connections** and the power of the resulting constellations of relationships. For our purpose, the relationships are between people, people and entities (i.e., groups, programs), and people and places. We represent the people, entities or places as nodes like circles or squares, and we represent the relationships between those actors as large or small ties, or colored ties, that specify different kinds of relationships.

In this study we are exploring the **network composition** (e.g., socioeconomics) and the **network structure** that inform how adults participate in and learn the science behind their plant and gardening interests, and the community of practice they build.



Networks, like those among people interested in plants and gardening, may involve key players, may involve many people or few, and may be spread out or involve tight groups. All can be represented in a diagram like the one above.

Examples of groups or programs with which people might experience their plant/gardening interests:

- Local gardening club or program
- National gardening association
- Local beekeeping group
- Nonprofit or volunteer group
- Social media interest group

Examples of places where people might experience their plant/gardening interests:

- ISE sites: Museums, Botanic Gardens, and Libraries
- Grocery Stores and Garden Centers
- At home or in my neighborhood
- Parks, trails and nature areas
- Public spaces for planting
- K-12 Schools
- Farmers Markets
- Farms and Nurseries
- Community Centers
- Community Gardens
- Speaker series or courses

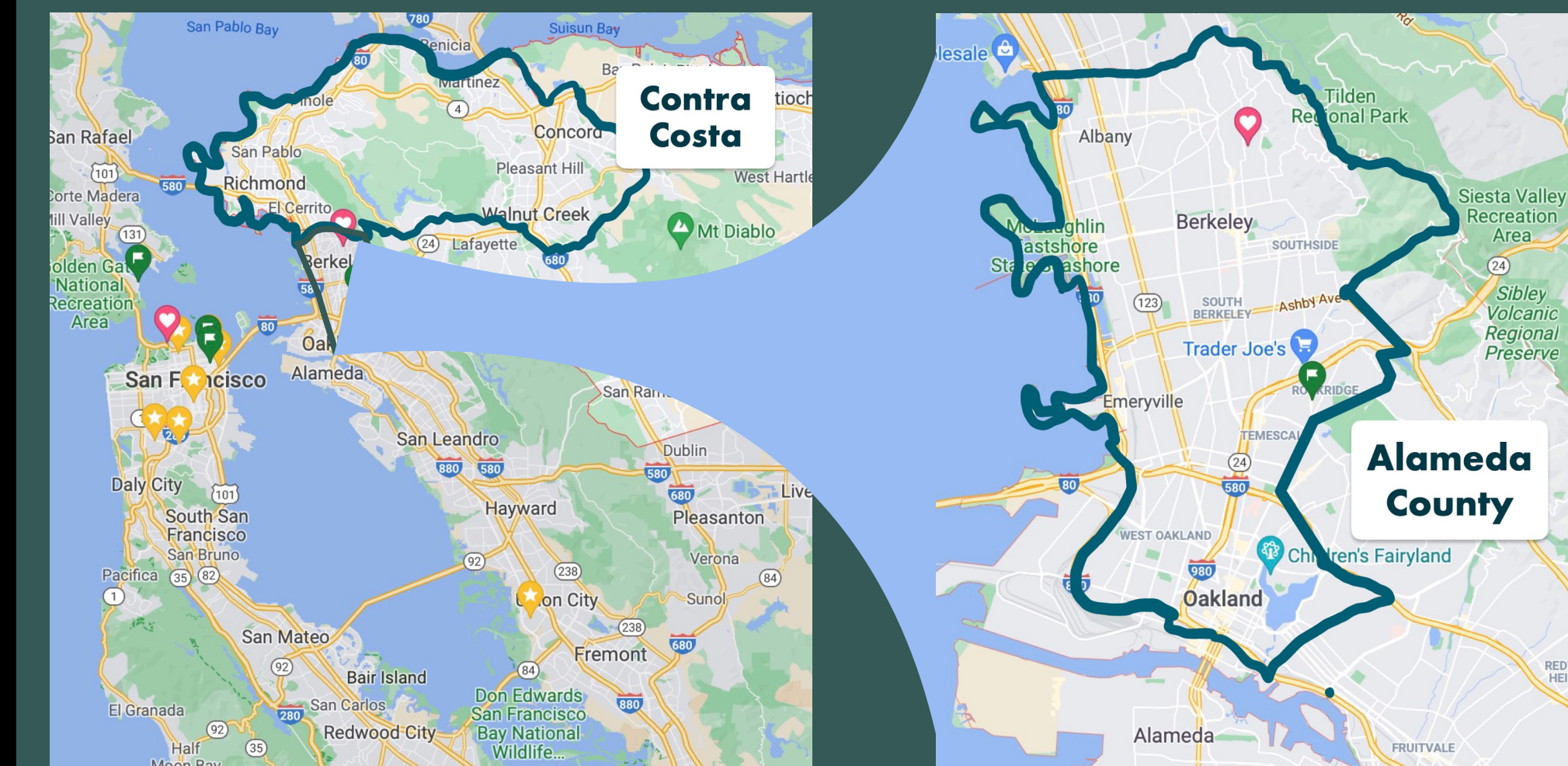
Where & With Whom: Economically & Ethnically Diverse Adults in California

Economically and ethnically diverse adults who live in Contra Costa or Alameda counties and participate in plant or gardening activities in their free time (*people who think about, learn about, or share information about plants & gardening*).



The first wave of participants were recruited by gathering recommendations from local individuals or entities that are prominent in the gardening scene. This first wave will then recommend other people in their personal networks for the second wave recruitment, etc.

The pilot phase of the project will take place in the highlighted region of Contra Costa county, the main survey effort will take place in an area of Alameda county.



Join us! Who do you know who may be connected to this work? Share your thoughts!



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