

Urban Landscape Trees: Spatial Patterns of Water Use

Anne Thomas, Brigham Young University
Research Mentor: Richard A. Gill, Brigham Young University

Goals

- Characterize the patterns of landscape tree diversity, density, and size in Heber Valley, a developing urban area, according to neighborhood type
- Relate species-specific tree water-use data to neighborhood planting patterns

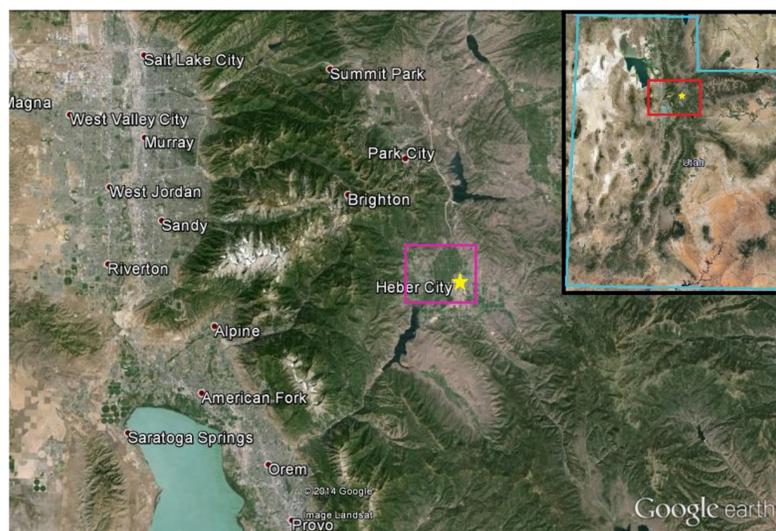


Figure 1. Location of Heber Valley, UT

Methods

- Create a stratified, georeferenced survey of landscape trees in four dominant neighborhood types in Heber City and Midway
- Collect species and size data using accepted forestry techniques for each tree in randomly selected lots

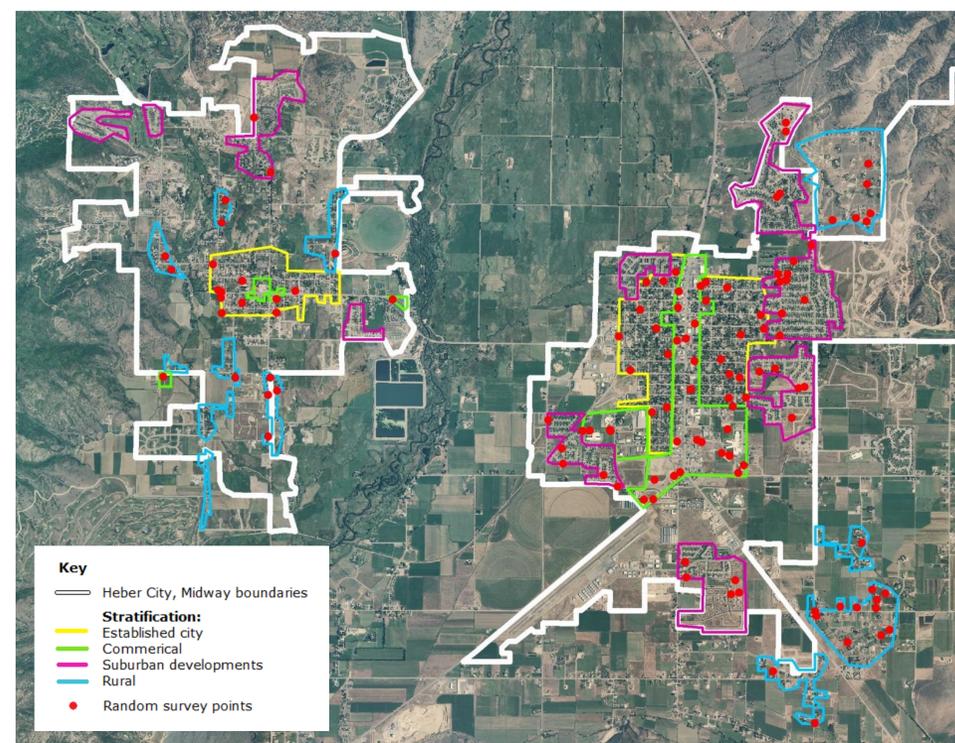


Figure 2. Map of stratified survey design in Heber City and Midway

Impact

- Landscape trees are an important factor in urban water use, especially where water conservation is an objective.
- Species diversity and size, and consequently water use, are expected to vary by neighborhood type - planting patterns may have significant implications for water use in a developing area



Figure 3. A row of trees in a commercial lot



aet4612@studentbody
.byu.edu

IFELLOWS UNDERGRADUATE RESEARCH PROGRAM



<http://iutahepsco.org>

