

Native Trees - DRAFT -

2024

Overview

While the many benefits of urban forestry and green space in urban areas are well-documented, there can be considerable apprehension about new initiatives increasing property values and potentially displacing current and long-time residents. To combat these unwanted outcomes, localities, organizations, and individuals must engage in equitable green development through a variety of policy and community engagement measures. There is a variety of useful research and case studies to help inform best practices to ensure access to green space for all without displacing residents.

Findings

What is a Native Tree?

- A native plant is one that has a historical relationship with the local ecosystem without human introduction or cultivation. These plants promote the health of the local ecosystem in a symbiotic relationship (National Wildlife Federation).
 - It is important to note that just because a plant thrives in a location, it is not necessarily native to that area. Many invasive species can thrive because of their position outside of the natural ecosystem of the place (National Wildlife Federation).
- Additional classifications of plants include non-native and invasive.
 - A non-native plant is one that has external origins to an area but does not harm the local ecosystem. Non-native plants can support the health of the ecosystem but are generally less beneficial to the overall ecology (Sotelo, 2022).
 - An invasive plant is one that has external origins and presents danger to the health of the local ecosystem. These plants have a negative impact on local ecology (Sotelo, 2022).

How to Choose a Native Tree

- Native trees and other native vegetation will vary from region to region. However, there are some resources available that can help learn more about local ecosystems and find the right plants.
 - Native Plant Finder
 - A website that provides various plant options centered around a given zip code. The tool provides a variety of options in trees, shrubs, flowers, and grasses as well as displaying what butterflies are attracted to them (National Wildlife Federation, 2024).
 - Audubon
 - A website that also provides various plant options around a given zip code. The tool outputs a description of the plant, offering further classification by attributes like fruit production, flowering, and animal attraction. This is the most user-friendly and visual-focused program on this list. It also provides ways to

connect with local resources to learn more about planting (National Audubon Society).

- The Biota of North America Program
 - A website that, although much more difficult to navigate and utilize, provides extensive detail on the various bio regions of the United States, their native vegetation, and taxonomic details to consider when planting. The site also provides links to a number of external sites that are more focused on specific locations (BONAP).

Case Studies

Altamira Project: California

- The project concerned planting and landscaping around a residence near the California coast. The use of native plants in the landscaping saw a substantial reduction in required water, maintenance, and erosion while seeing an increase in local fauna (Tree of Life Nursery).

Native U.S. Plants in Honey and Pollen Production: Continental U.S.

- Honeybees provide an estimate 80% of food and agricultural crop pollination, making them a critical component of North American farming. Native plants are more conducive to the health and growth of bee populations (Alexander, 2021).

References

Alexander, A. G., & Alexander, S. J. (2021). CASE STUDY.: Native U.S. Plants in Honey and Pollen Production. In E. T. Jones, R. J. McLain, & J. Weigand (Eds.), *Nontimber Forest Products in the United States* (pp. 223–236). University Press of Kansas. <https://doi.org/10.2307/jj.7941367.23>

The Biota of North America Program (n.d.). *The Biota of North America Program North American Vascular Flora*. BONAP. <http://www.bonap.org/>

National Audubon Society (n.d.). *Native Plants Database*. Audubon. <https://www.audubon.org/native-plants/search?zipcode=32210&tab=best-results>

National Wildlife Federation (n.d.). *Native Plants*. <https://www.nwf.org/Garden-for-Wildlife/About/Native-Plants>

National Wildlife Federation (n.d.). *Native Plant Finder*. Native Plant Finder. <https://nativeplantfinder.nwf.org/Plants>

Sotelo, G. (2022, February 25). *What is the Difference Between Native, Non-native, and Invasive Plants?* Audubon. <https://www.audubon.org/news/what-difference-between-native-non-native-and-invasive-plants>

Tree of Life Nursery (2008, March 14). *Case Study: Altamira Project*. California Native Plants. <https://californianativeplants.com/blog/california-native-plants/case-study-altamira/>