



# VANCOUVER TREES

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## PROJECT OBJECTIVES

The primary objective of the Vancouver Trees project is to provide Landscape Architecture 316 (LARC 316) students with a digital application containing text and images of their course-required material. It is, essentially, a digital textbook.

Secondary objectives of the Vancouver Trees project are:

- to provide LARC 316 students with a comprehensive regionally-appropriate resource of approximately 1000 trees used by landscape architects in the Vancouver area
- to provide LARC 316 students with a digital application that will be useful to them in other coursework and in their future careers
- to remove some of the logistical barriers to student learning in LARC 316
- to provide a framework for future additions of content and features to the digital application

By providing the first comprehensive, regionally-appropriate resource for the Vancouver area, the Vancouver Trees project will significantly contribute to the enhancement of teaching and learning. Additionally, the proposed project will deliver to the students a digital application which will be useful to the students in other coursework and, once graduated from UBC, as practicing professionals. This meets the TLEF criterion of providing sustainable benefits.

The Vancouver Trees project is tailored to meeting the Student Learning goals of UBC's Place and Promise vision, particularly the goal of strengthening efforts to promote student success. As the proposed digital application will continue to be of use to practicing landscape architects and, in so doing, reconnect professionals with UBC, it also touches on the Alumni Engagement goal of Place and Promise.

Lastly, the UBC Place and Promise goal of Sustainability is addressed with respect to the environment. When landscape architecture students and professionals make the right decisions about the use of plantings in a landscape, which we hope will be more likely with a comprehensive regionally-appropriate resource, plantings do not have to be revisited or redone as often as plants will survive longer and be appropriate to the space and environment.

## SIGNIFICANCE FOR STUDENT LEARNING

The significance of the Vancouver Trees project is two-fold.

1. No comprehensive, regionally-appropriate resource is presently available to provide students with accurate, locally-relevant information. Students must presently rely on inadequate texts from other regions for information to supplement the material taught in class. Often, this information is neutral at best but can actually be detrimental to the local landscape (if, for example, a landscape architect uses a recommended street tree from a reference for northeast USA that is actually invasive in the Vancouver region).
- 2) Due to the subject material (woody plants in the landscape), Landscape Architecture 316 requires significant outdoor teaching in inclement weather (course runs from September through December). This environment causes some atypical challenges which we believe are barriers to effective learning; students must take excellent notes and usable photographs in inclement weather, they must revisit the plants for additional observations which can be a time-challenge as not all plants are present on-campus or in one central location on-campus, and finally, LARC 316 students must rely on inferior resources to reinforce and supplement what is learned during class.

The development of the digital application, "Vancouver Trees", will provide an enhanced learning experience by supplementing the outdoor classroom instruction with a comprehensive, regionally-appropriate resource. By doing so, the out-of-the-ordinary challenges above are mitigated:

- the app will provide students with sufficient written and image content to remove the necessity of perfect note-taking in the inclement weather often faced during the period when the course is taught
- the app will permit students to be selective about which plants they need to revisit for learning and which plants they feel comfortable enough to forego revisiting after the initial classroom instruction, as the resource will be a sufficient study aid
- the content of the app will provide regionally-appropriate plant information and serve as a comprehensive resource both for the students while at UBC and into their career as practicing professionals



rainy fall plant walk



tree for park

ornamental features

## APPLICATION POST-GRADUATION

As landscape architecture is associated with visual design of outdoor spaces, the appropriate use of trees and shrubs is central to the work performed by landscape architects throughout their careers. It is critical for landscape architects to select the "right plant for the right place", as inappropriate selections lead to additional future costs for the private client or citizens of a municipality.

The effective dissemination of this information is critical, as we know that trees can have a dramatic positive effect on the quality of the urban environment socially, aesthetically and economically. A healthy urban forest reduces air pollution, reduces soil erosion, cools the air and provides habitat for wildlife. Proper tree selection is the first step in ensuring trees are healthy, and able to provide these benefits.

Often, landscape architects struggle to find reliable reference material for plants in this area and even when a trusted source can be found it rarely addresses adequately the issues they face. While most reference books describe how plants perform in home gardens or nurseries, the profession deals with varied settings, from streetscapes to rooftop patios to habitat restoration projects. Green roofs, rain gardens, bioswales, urban agriculture, and plantings that support biodiversity are common project requirements; it seems clear that selection of plant material is becoming an increasingly complicated task. These challenges demand professional selection of appropriate plant material and yet an information gap exists.

Our intent is to bridge this gap by presenting information about plants relevant to the varied settings and conditions that landscape architects engage with. The app is embedded with features that will make it quick and easy to find answers to questions.

## METHODOLOGY

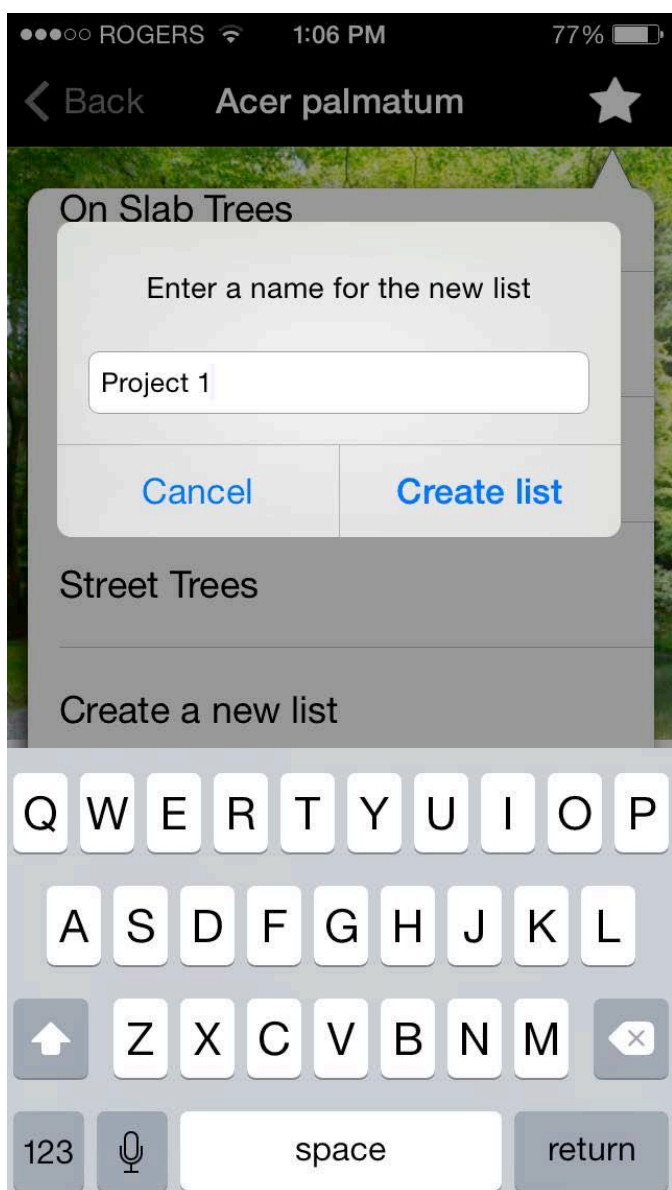
We have formed a multi-disciplinary team of educators, scientists and landscape architects to create application software dealing with the subject of trees suitable for growing in the Canadian Pacific Northwest. Our research includes the kinds of technical information required by landscape architects and will be shared in a unique format.

With this research we will bridge the gap between botanical knowledge and the requirements of the profession to deliver the specific information needed about trees. Having a reliable reference on trees geared to landscape architects is a great advance in itself; being able to take that resource outside of the office setting is even better. One can check facts at nurseries when making plant substitutions, find identification tips on site when inspecting plant material, show images to clients in meetings, or to learn more about an interesting tree when out on a plant walk. The practical uses of the app for the professional are many.

## FEATURES



1. HOMEPAGE donor recognition



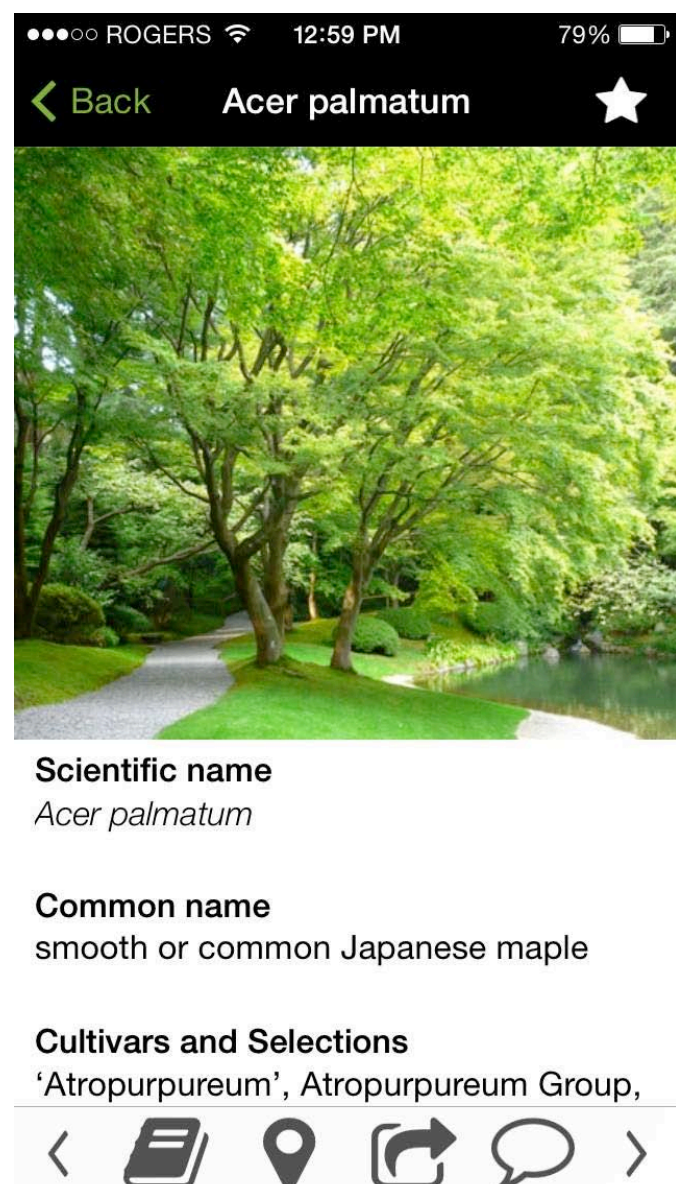
4. CUSTOM PLANT LISTS can be annotated



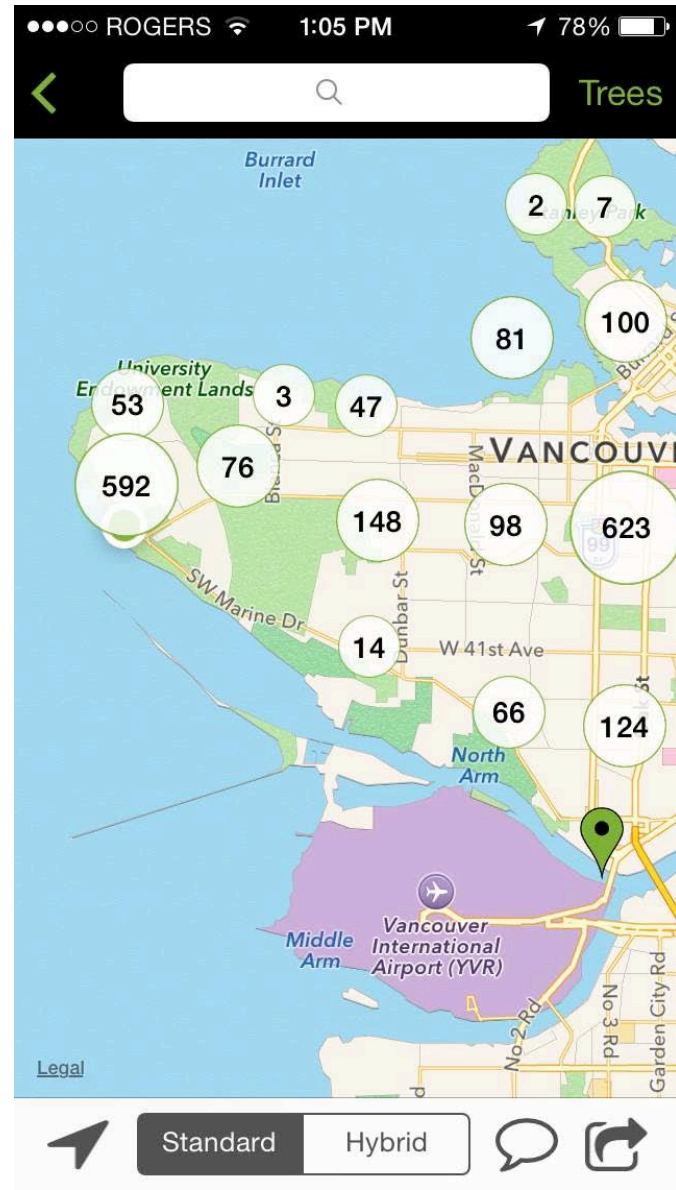
7. PHOTOS 2500 photos of local trees



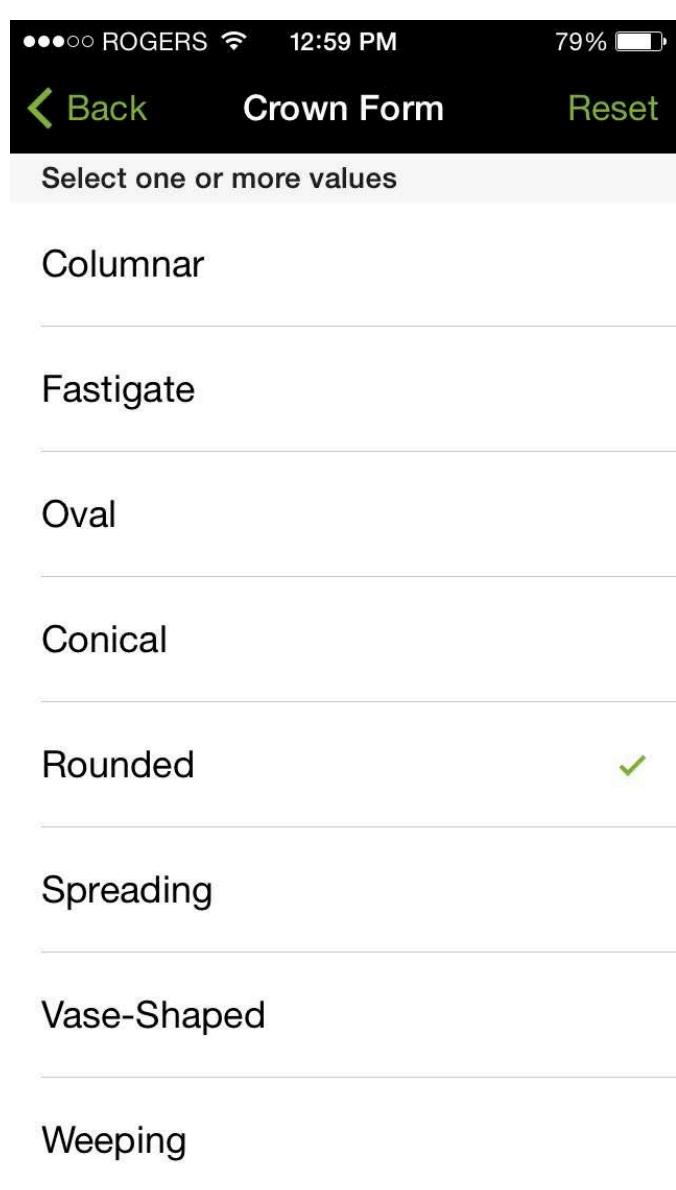
2. BROWSE by common or scientific name



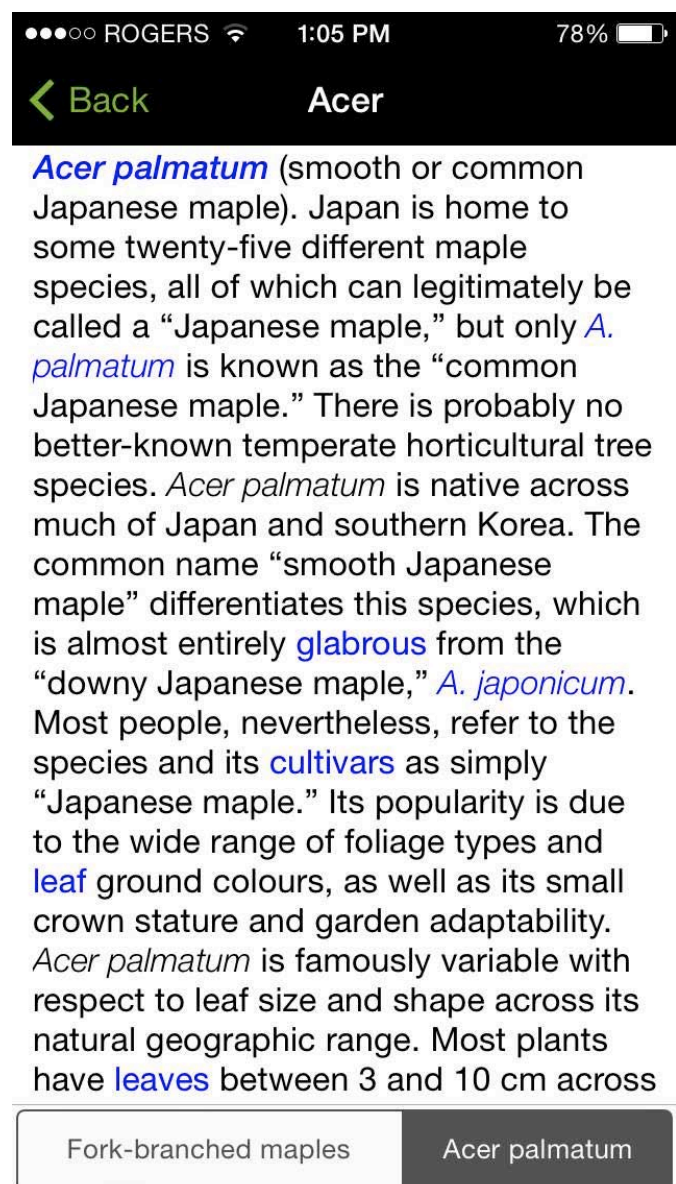
5. ESSENTIALS PAGE plant descriptions



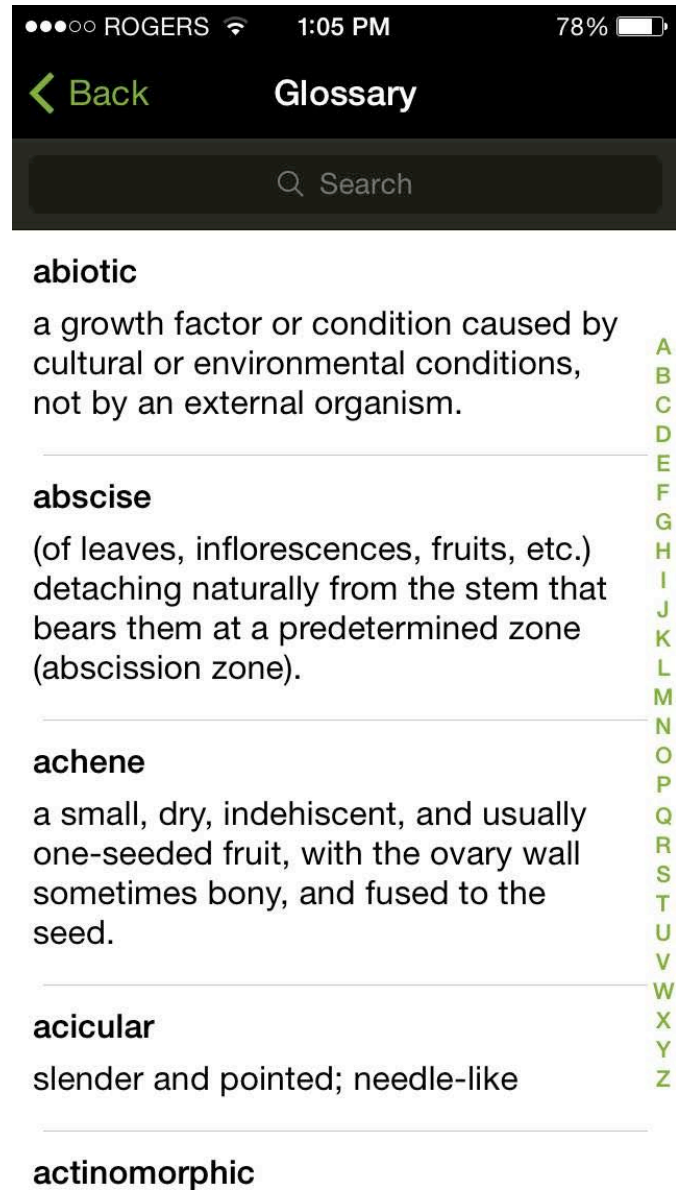
8. INTERACTIVE MAP locations of local examples



3. ADVANCED SEARCH by user set criteria



6. GENUS PAGE description of genus



9. GLOSSARY technical terms defined

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