

University of Minnesota Twin Cities Campus Arboretum



Chapter Two: Signage

Jack Faje, Max Hoffer, Ada Moreno, Maria Noga, Kathleen Russell, Koehl Simmons

Introduction

The signage component of the arboretum on the Twin Cities campus is important because adequate signage can add education, information, and advertising for the arboretum. Currently, there are some signs identifying trees around the University, but they are not designed minimalistically or in collaboration with the University's Facilities and Management Landcare. The conceptual ideas put together in this section of the report focus on digital signage, physical signage, and information that should be included for a user or potential user of the arboretum. Please refer to the design of our pamphlet and GIS Story Map in the appendix throughout this section.

Through the signage section, we hope to portray potential ideas for the arboretum as well as why signage is an essential piece to the introduction of significant plants. The discussion will begin with options for digital signage, physical signage, and content and then will conclude with next steps for each of those categories. We hope that Landcare will have specific ideas as to where to go next to make signage in the arboretum a reality.

Background

Information is necessary for all aspects of life. The text must be the right amount. Too little and the reader or user is confused. Too much and the user is overwhelmed and may lose interest. Varying types of ways to see information also can apply to a broader audience. Those that are more comfortable having a physical copy of the brochure can have a nicely laid out and colored brochure and those that prefer to have a scrollable interactive way to take in information have that option as well. We also wanted to create templates that were easy to be edited but did not include a lot of content that would need to be changed continuously and reprinted.

To take advantage of all the available informational resources, we decided to have both digital and physical signage. Digital signage can be easily updated and maintained and offers an opportunity to include additional information for visitors who may want to learn more about a specific collection of trees or tree species. ArcGIS was the chosen online platform to display arboretum maps and include background information on selected trees. This option also allows visitors to interact with the signs through their mobile phones easily. Another method chosen to make the user experience more engaging was to include physical signage in the form of a brochure. The brochure is meant to provide visitors with brief, but concise and aesthetically pleasing information regarding the arboretum.

As an additional resource to engage visitors of all ages, we researched different types of Scavenger Hunts conducted in three botanical gardens in the United States. The San Antonio Botanical Gardens offers Culinary and Cocktail Scavenger Hunts. This activity consists of a self-guided photo hunt where staff gives you a list of ingredients growing in

the garden, and visitors can find, capture and present the images to the bartender, who will prepare a cocktail. While this event targets a specific age group, it identifies potential events that could help within the arboretum.

The Riverbanks Botanical Garden in Columbia, South Carolina has a different approach, and provide a scavenger hunt list with landmark attractions throughout the garden. A similar list could be created for the University's arboretum and could highlight University landmarks of point of interest throughout pathways.

Similarly, the Denver Botanic Gardens offers a list and bingo scavenger hunt. The Botanic Gardens also include a sensory scavenger hunt that comes in both English and Spanish. Creating multi-sensory experience scavenger hunt at the University could engage different groups of people and make the Arboretum visitor experience incredibly rich and engaging.

Options Introduction

The options section of the report discusses the potential type of signs and information we believe are necessary to get the point across to the user. The section summarizes all of the possible ways to lay out the information that was investigated. The options also set the stage for the recommendations for next steps.

Options: Digital Design

We decided to put most of the information for the Arboretum online to keep the physical signage and brochures concise. Therefore, when choosing an online interface for the arboretum, we set out with three goals in mind: easy accessibility, mobile compatibility, and pleasing aesthetics. After evaluating a few different options such as Google Maps and OpenStreetMap along with ArcMap, we decided that ArcGIS Online met our goals the best. Choosing ArcGIS was convenient because the University of Minnesota has a license to use ArcGIS. We tested many types of WebApps, and we settled on the Shortlist builder, which met our goals the best.

Within the ArcGIS map, different types of content needed to be displayed. In our pilot map, we used three components; a transit map (made by the Transit group), a significant site map (selected by the transit group), and a tree map (using the already Campus Trees as a placeholder and template for content). When these three components are used together, they allow for a more natural way to navigate and aesthetically pleasing WebApp template for a guided tour.

Options: Content

The content in the brochure is meant to provide concise information on what an Arboretum is, what makes the University of Minnesota Twin-Cities Arboretum distinctive, and how visitors can contribute and collaborate to its mission. The first inner fold on the brochure is meant to provide an introduction to the use and functions of arboretums. We

specifically chose to highlight its research, educational and conservation purposes. Below this information, we included a brief overview of how the University's arboretum came to be and who was involved in the process.

The Vision statement included reflects the survey's respondents answers of wanting the arboretum to be a place for enjoyment and education. Moving forward, this would be an excellent location to place the finalized Mission and Vision statement. Given the multiple stakeholders involved in the planning, research process and future implementation, we chose to include a list of contributors at the bottom.

The inside of the brochure contains text on what makes the three respective Twin-Cities campuses significant, those being the St. Paul Campus and the two campuses that make up the more extensive Minneapolis campus system, East Bank and West Bank. This section of the brochure is meant to provide brief but concise relevant background information regarding each of these campuses with the hope that a user of the pamphlet (especially someone not familiar with the University) can better understand what makes these campuses unique in their own right as they relate to the campus arboretum.

The back portion of the brochure provides the reader with information on the criteria used to select the collection of trees. After consulting with the Significant Team, we included the following five tests criteria for inclusion in the arboretum: horticultural, social, educational, historical, or aesthetic.

Lastly, we included a section for donations and volunteer information to provide visitors with resources on how they can help. We identified three different ways to contribute: making donations, sponsoring a tree, or through volunteering. For additional information or question, we also included Landcare's contact information.

Options Physical Signage

We chose to use a tri-fold brochure as our main physical form of information because it can be easily carried around the arboretum and can be printed on a standard sheet of paper. The tri-fold also allows the brochure to have distinct, separate sections for subcategories of information. All information on the signage will be compliant to the Universities policies.

The brochure opens with a design that abstractly introduces the user to the native species and plants textures they may see throughout the arboretum. The interior pages hold the bulk of necessary information to navigate through the arboretum including a map and summary of the themes of each of the campuses. A placeholder is there to show that the map should be informative, but also not very busy. The busier, more detailed map should be included in the digital online platform and the brochure should queue readers to visit the online story map.

The exterior two pages that do not include the cover have an area to have a section cut that shows the scale of tree species located on the campuses. We would recommend that this is an accurate portrayal of an actual scene found on the campus so that astute observers can notice that it is a real place.

Recommendations Introduction

The recommendations clearly describe how Landcare can take the research we have done to continue to make the arboretum a helpful tool for those at the University and visitors. The recommendations can also be taken by the next semester students to solidify the message of the arboretum.

Recommendations Digital Design

We would recommend that the next group finalize the WebApp that we created by adding the content that their class comes up with as well as refine the layout as needed. The WebApp should be collaborative and owned by the U of M Forestry account to facilitate finalizing and updating, and can later be transferred to the care of Landcare or as decided by the committee for future maintenance. The trees across all three campuses should be added to the map as well as descriptions and as much information as appropriate for each of the trees and selected sites. The next class should also generate a new QR Code with a link to their final map and make sure that the QR Code is included on all arboretum signage and literature.

We also recommend to include many types of information in the description of features on the map, including environmental/ecological benefits, species description, cultural significance, and individual tree history if applicable. This variety of information can appease stakeholders that desire their subject to be covered.

Recommendations Content

The goal of the content section is to provide information that would not need to be changed and updated regularly, as that does not seem feasible nor practical. With that said, in projects of this nature, there is always going to be new ideas and new ways of looking at things, especially as new faces and players emerge. We would recommend that these new players collaborate and finalize the sponsors and contributors to the arboretum as well as continue to translate text in both the brochure and story map into multiple languages so that a variety of audiences can benefit from the arboretum and its supplemental information. We urge the next group that tackles this project to decide if the "How can I help?" section is feasible and also decide if the scavenger hunt idea to make the arboretum more kid-friendly is a route they wish to take and if so, build upon the framework which we have set forth. Lastly, we recommend they update the mission statement as they see fit.

Recommendations Physical Signage

For smooth processes regarding the physical signage (pamphlet and outdoor signage), we recommend maintaining communication with the UMN sign shop to ensure all graphics and content hold up to the University's branding guidelines. These guidelines include font, color, images, readability, etc. Once a finalized design is selected and verified, the next steps may include further research for additional language options, printing, and a selection of locations to hold the pamphlets. Due to a concern for paper waste, we recommend exploring more sustainable ways in which the paper pamphlets could be produced and discarded. We recommend that the next FNRM 4501/5501 class communicates with Landcare and the UMN sign shop to select further options for outdoor tree signage that meets everyone's desires, while also discussing price.

Works Cited

"Botanical Garden Scavenger Hunt." *Riverbanks Botanical Garden*, www.riverbanks.org/education/scavenger-hunt.pdf.

"Cocktail Scavenger Hunt." *San Antonio Botanical Garden*, www.sabot.org/event/cocktail-scavenger-hunt/.

"Sensory Scavenger Hunt ." *Denver Botanic Gardens*, www.botanicgardens.org/sites/blog-photos/sensoryscavengerhunt_en_es.pdf.

Appendix

Draft Brochure

What is an arboretum?

The word arboretum means a botanical collection (-etum) of trees (arbor-). An arboretum is an area dedicated to growing and displaying a variety of trees for research, conservation, and educational purposes.



History

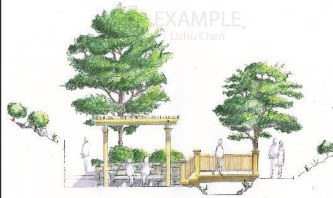
The University of Minnesota's Twin-Cities Arboretum began as a joint effort between multiple departments, organizations, and students within the University. The Arboretum's vision is to become a valuable environmental and community asset while promoting and enhancing education and enjoyment.

Contributors

Department of Forest Resources
Department of Horticultural Sciences
Department of Landscape Architecture

What makes a plant significant?

Nominated natural features on University of Minnesota Twin Cities property should satisfy one of the following five criteria values for inclusion in the Campus Arboretum: horticultural, social, educational, historic or aesthetic.



How can I help?

- Make a donation
- Sponsor a tree
- Become a volunteer

LANDSCAPE CONTACT
[EMAIL]
[PHONE NUMBER]

Campus Arboretum



University of Minnesota



[Campus Significance]

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna

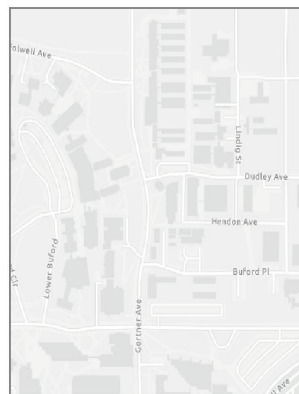


Legend



[Campus Significance]

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna



Legend



[Campus Significance]

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna



Legend

Draft ArcGIS Story Map

UofM Twin Cities Campus Arboretum sample



Trees sample

Significant Areas

Campus Connector Stops

About



American elm



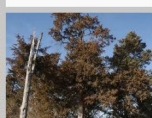
Eastern Redbud



Blue Beech



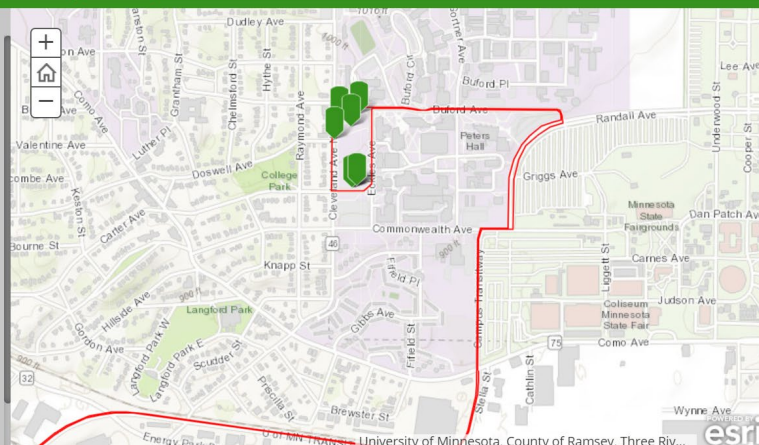
Ginkgo



Eastern Red Cedar



Northern White Cedar



UofM Twin Cities Campus Arboretum sample



Trees sample

Significant Areas

Campus Connector Stops

About



Bee Lab & Pollinator Garden



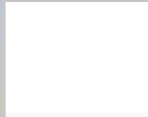
The Lawn



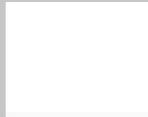
CBS Conservatory



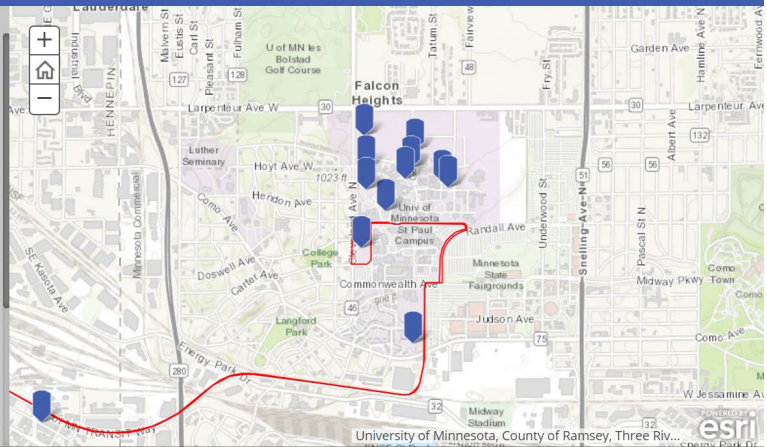
Dept. of Horticultural Science Display & Trial...



Mullin woods



Woodlot along Buford



UofM Twin Cities Campus Arboretum sample



Trees sample

Significant Areas

Campus Connector Stops

About



St. Paul - St. Paul Student Center



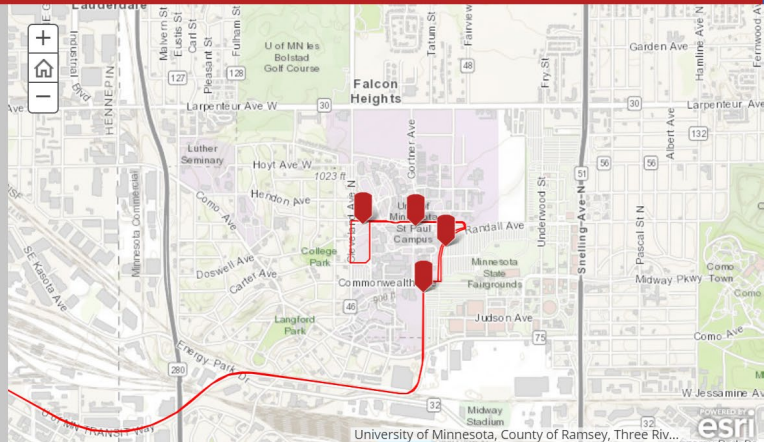
St. Paul - Buford & Gortner Avenues



St. Paul - State Fairgrounds Lot



St. Paul - Transitway at Commonwealth Avenue



UofM Twin Cities Campus Arboretum sample



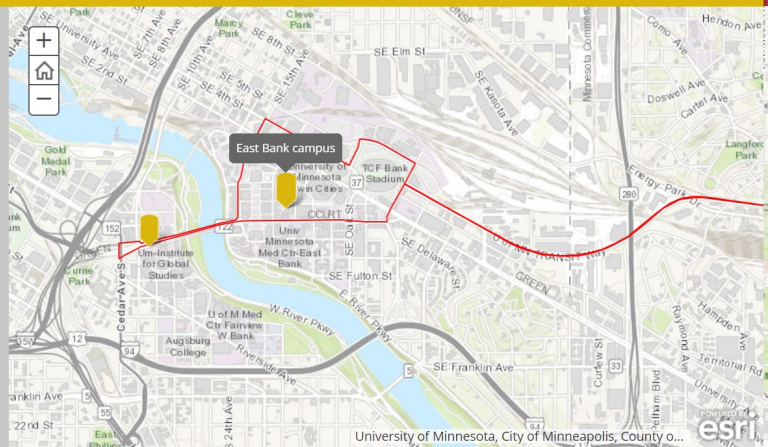
Trees sample Significant Areas Campus Connector Stops About



East Bank campus



West Bank Campus



Camera 1:13 PM umn.maps.arcgis.com

Significant Areas

Bee Lab & Pollinator Garden

The Lawn

CBS Conservatory

The Lawn

The Lawn is a large open space that is characterized by a large area of maintained grass within it bordered by a large variety of tree and