Campus & Inventory Project Narrative

Franklin and Marshall College (F&M) is located in Lancaster, Pennsylvania, originally named Franklin College after Benjamin Franklin and Marshall College after John Marshall. Franklin and Marshall was founded in 1787 and currently has approximately 2,300 undergraduate students. The campus sits on approximately 170-acre site within Lancaster County.

In the fall/winter of 2015, F&M became very interested in having a tree inventory conducted on campus. They began to work with Bartlett Tree Experts and specifically the Bartlett Inventory Solutions (BIS) team. Ted Schmid, Director of Grounds, and Nic Auwaerter, Sustainability Coordinator, spearheaded efforts on the F&M side to get the inventory project approved. An initial on-site meeting and educational presentation was then conducted among Bartlett and F&M representatives. Proactive management and risk assessment were the main goals for Ted; however, Nic was very interested in the ecosystem benefits provided by the trees that could be quantified using i-Tree. That meeting laid the groundwork for the inventory, where it would not only help serve the Facilities Management Department with management, but also assist the Sustainability Committee with reaching their goals.

The inventory was conducted in May and June of 2016. It concluded with 1,150 trees being inventoried, with a tree diversity of 123 species. The i-Tree Eco analysis estimated that the carbon storage of the inventoried trees was over 1,000,000 pounds, sequestered almost 27,000 pounds of carbon annually, and provided over 20,000 cubic feet per year of avoided stormwater runoff! The tree risk assessment, management plan, i-Tree Eco ecosystem benefit quantification, and access to the web-based management program ArborScope™ provided F&M with all the necessary information to begin pro-actively managing the campus and working toward their sustainability goals! The process also gave them information and valuable tools to assist them with meeting the standards to remain Tree Campus USA in the future, an award they received in early 2016!

After the Tree Inventory

Like most institutions that have a tree inventory conducted and management plan created, they saw immediate benefits, including being able to find out any piece of information necessary for any tree on campus through the ArborScope™ program. The immediate removals were identified as well tree work prioritization which has helped F&M become more proactive. Vital tree structure information is documented. Dedicated trees are now being tracked more effectively. The quantification of tree benefits and values are allowing Ted and Nic to make the argument for tree protection during construction projects on campus. Also, when trees have significant damage or defects and need to be removed, the information is available to make the argument for tree replacement. Finally, the tree species information is helping inform the team ahead of new plantings so they can focus on diversity and urban forest resiliency.

The i-Tree Eco information is being used in their work on the college's sustainability master plan, with a goal of carbon neutrality. The i-Tree Eco information can also help F&M reduce their stormwater fees to the City of Lancaster by 50%! There is even currently one group of dedicated students that are using the inventory information to help develop educational materials for a variety of different age groups. Nic says

that "associating quantitative information with trees and environmental benefits perks people's ears, especially donors and trustees!"

Future Plans

The future is very bright for F&M! They are currently working on achieving a Level 2 Arboretum status through ArbNet. Along with that effort, they are planning on creating an F&M Arboretum website where "information from the inventory will be pivotal for educating the campus community on species information as well as overall benefits of the campus tree population," says Nic. Further usage by students and professors on campus as a valuable educational tool is also a future goal. On the research side of things, Nic wants to focus on comparing success rates across campus, examining native tree success across campus, and examining the i-Tree Eco information across campus to help develop and analyze trends.