Name of Principle Investigator: Nina Bassuk  
Project Title: Integrated Online Database for Plant Identification and Use in the Landscape

1. Please consider the original timeline and deliverable targets. How is your project progressing compared with the original estimates?

Our original timeline began in July 2013, but work was delayed until September 2013. With a focused code sprint, we are close to being back on track and have completed most of Phase One for January 2013. This phase included creating a new framework, data analysis and import, a beta adaptive web design and user interface, and image manipulation. Although the user input functionality (content and images) is behind schedule, the search functionality and location data preparations for phase two have already begun.

2. How is spending progressing when compared with the original budget estimates?

Laying the ground work in the early phases of development was more time consuming than expected and in retrospect, should have budgeted for a larger development percentage for this phase. We will know more about the line item for student help as we move forward with the manual data entry in Phase Two. In terms of disbursement, there has been a delay in access to the funds and the contractor has not been paid for Phase One yet, but we believe this will be resolved over the next couple of weeks.

3. Please provide feedback regarding your experience with the project execution. In particular, any issues or roadblocks you’ve encountered that may have been unexpected.

There are challenges with integrating the various plant location data into the application. For example, the campus tree inventory, the existing woody plants database, and the CAD maps of the plant walks do not have a common primary identifier which makes it difficult to link up the data for creating online maps. The application framework is on place, but the software library being used to create these maps is still under investigation as the location data formats have not been finalized yet. This project has highlighted areas of campus data resources from academic programs, library collections and equipment, grounds, and maintenance information that would benefit from a coordinated integration effort (possible future work). The woody plants database has 400 records and we will link up the locations manually initially, but we are also investigating ways to keep the existing and future data synchronized.
In retrospect, the development timeline should have included more overlap of the data analysis and functional components (search, image, location) rather than distinct segments. Some areas needed to be worked on early to lay the groundwork that were slotted for later and some functionality (image management) slotted for Phase One, needed to wait until the framework was farther along.

4. What are your positive observations or pleasant surprises about your team's interaction or project process that might would be helpful to other PI's?

Our meetings have included the two PI's (professor and software developer) and the communications specialist from the Horticulture Department who is responsible for the department websites. This has been a great core working group that covers the important areas for this project. We have also met with a graduate student representative who has been a student and teaching assistant for the course that the woody plants database is used in the curriculum. While we will do user testing with the students in the course this spring, his early insights and ongoing involvement has been extremely helpful. The campus tree inventory manager was consulted and has kindly agreed to help with the location data integration. This helps with getting real data imported to develop the application against, and seeds the site for demonstrating functionality while we collect new location information in the next phase.

We’ve been using BitBucket for code versioning, issue tracking, and wiki documentation. Although it's been more useful for the software developer initially, it is a good way to communicate status reports at meetings. It should also be helpful to everyone for tracking issues (enhancements and bugs) during the testing phases.


5. Please describe any challenges you've encountered working with your project team that you've found solutions for that might be helpful to other PI's.

We have very productive and exciting meetings for this project, and even though we have an agenda prepared, an hour is never enough to finish our discussions. We could have planned for more frequent meetings and/or bigger blocks of time.