

INCORPORATING DIGITAL PLANT WALKS USING GOOGLE MAPS™ IN PLANT MATERIALS COURSES

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Introduction

Horticulture plant materials courses are typically comprised of laboratory and lecture components in which, students are introduced and exposed to different plant species through *in situ* walks around campus grounds, gardens, arboreta, etc. Frequently, the amount of time to take-up or observe the plant species for a given weekly plant list is limited. Digital plant walks, have received positive feedback from a preliminary trial in a landscape plant identification course at Kansas State University.

Approach

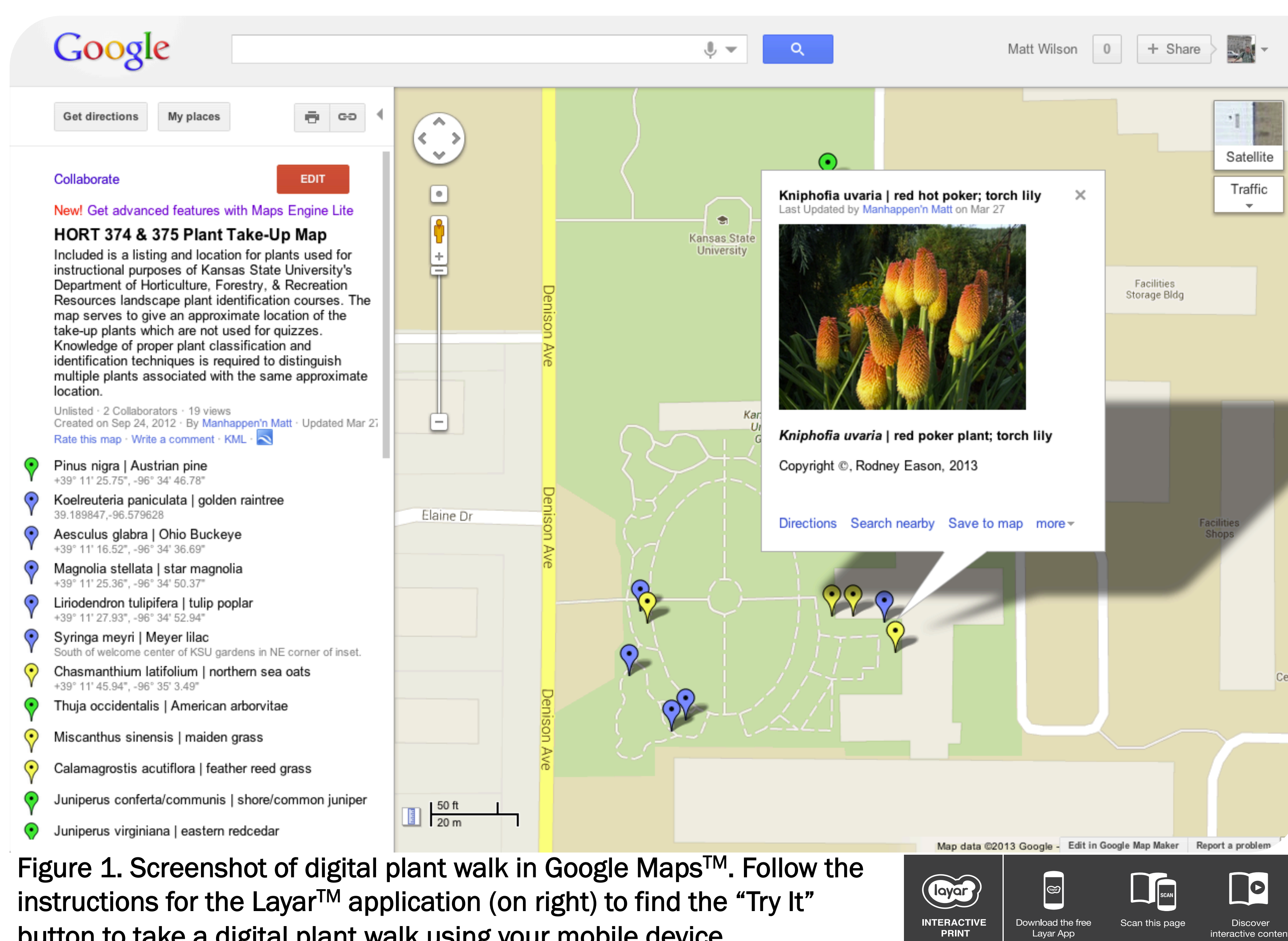


Figure 1. Screenshot of digital plant walk in Google Maps™. Follow the instructions for the Layar™ application (on right) to find the “Try It” button to take a digital plant walk using your mobile device.

To supplement laboratory information, digital plant walks were created using Google Maps™ to provide students with the locations of plants from weekly plant lists, critical identification information, and media such as photographs and videos. The generation of these maps allows students to re-trace laboratory plant walks on their own time using various mobile devices. Additionally, digital plant walks may actively engage students through the use of collaborative class maps that require students to research and provide identification information along with photographs and videos for plant descriptions.

Literature Cited

Campbell, K.R., S.B. Wilson, P.C. Wilson, and Z. He. 2011. Interactive online tools for teaching plant identification. HortTechnology 21:504-508.

Contreras, R.N., J.J. Velez, and R. Golembiewski. 2013. Are learning styles, study habits, and performance correlated in woody plant identification students? HortTechnology 23:130-133.

Student Feedback

Student comment and responses about digital plant walk implementation (Course Evaluation “TEVAL”, Spring 2013).

“When studying for a quiz, I would be able to see the plant in my mind and I could remember where it was on campus, but I couldn’t remember the name. I could easily access this information on the maps.” –Student Comment

Do you think that the incorporation of plant list maps with identification information and media such as photos and videos would be beneficial to your learning/identification of the plant material covered in this course? -TEVAL (n=15)

Not useful	6.67%
Somewhat useful	26.67%
Very useful	66.66%

Conclusions

Increased availability of mobile technologies (wireless internet, smartphones, and tablets) have allowed for the implementation of applications such as Google Maps™ to provide instructors and students with additional resources for increased active participation and learning as evidenced by Campbell et al. (2011) and Contreras et al. (2013). Research of collaborative, digital plant walks are planned for Fall 2013 and Spring 2014.

Take an interactive tour of one of the plant walks for yourself with your mobile device! Download the Layar™ application with this QR code to find the hidden “Try It!” button on this poster. This application can also be used to find buildings on the campus of Virginia Tech by downloading the VT Campus Geo Layer within the Layar™ app. Check it out!

