

TREESNAP: A CITIZEN SCIENCE TOOL TO HELP OUR FORESTS

**Bradford J. Condon, Ellen V. Crocker, Abdullah Almsaeed,
Albert G. Abbott, C. Dana Nelson, and Margaret Staton**



Abstract—We created TreeSnap, a mobile app available for iOS and Android that connects interested citizens with tree breeding programs to help fight forest threats through both awareness and research. TreeSnap integrates the outreach and education efforts of different tree breeding groups. The mobile app combines reporting for multiple tree species in a single place with an intuitive and convenient interface, while the web database provides an easy way for scientists to analyze the collected data. Our goal is that scientists will gain data on trees to use in research programs while the public will become more engaged in and informed about forest health. Currently, restoration tree breeding programs each have their own portals and requirements for submitting potential trees for inclusion in breeding programs. TreeSnap provides a more unified gateway for members of the public to submit information to scientists. The app is designed to easily incorporate more trees as we build new collaborations. Similarly, each tree submission type is customizable, which allows us to ask different questions for each tree, providing the relevant information to scientific partners. TreeSnap prompts users to take photos of trees and answer questions specified by each tree-breeding program while collecting GPS coordinates. Meanwhile, the web app allows participants to view, track, and edit their submissions, and will serve as a learning resource. For scientists, the web app provides a single location for tracking and curating submissions, contacting participants with questions, and working collaboratively to visit and sample trees of interest.

Author information: Bradford J. Condon, Postdoctoral Scholar, Department of Entomology and Plant Pathology, The University of Tennessee, Knoxville, TN 37996; Ellen V. Crocker, Postdoctoral Scholar, Department of Forestry and Natural Resources, Forest Health Research and Education Center, University of Kentucky, Lexington, KY 40546; Abdullah Almsaeed, Research Associate and Web Developer, Department of Entomology and Plant Pathology, The University of Tennessee, Knoxville, TN 37996; Albert G. Abbott, Project Lead, Department of Forestry and Natural Resources, Forest Health Research and Education Center, University of Kentucky, Lexington, KY 40546; C. Dana Nelson, Research Geneticist and Project Leader, Southern Research Station, USDA Forest Service, Saucier, MS 39574; and Margaret Staton, Assistant Professor, Department of Entomology and Plant Pathology, The University of Tennessee, Knoxville, TN 37996.

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