DELPHI EXPERT OPINION SURVEY TO ASSESS THREATS TO OAKS IN THE EASTERN UNITED STATES

Ellen V. Crocker, Anna O. Conrad, Xiaoshu Li, Billy Thomas, Thomas Ochuoeho, and C. Dana Nelson

Abstract—Oaks are important fixtures of many Eastern United States forests, providing both ecological and economic benefits. While regeneration is a major issue impacting oaks currently, biotic (e.g., pests and pathogens) and abiotic (e.g., abnormal weather and climate change) stressors, may also threaten oaks in this region. The goal of our Delphi expert opinion survey is to identify the most significant threats (biotic and abiotic) to oaks in the Eastern United States (as defined by the eastern and southern regions of the U.S. Forest Service), and to gauge the potential impact of these threats on oaks. To accomplish this, we initiated a three-part Delphi expert opinion survey. The iterative Delphi approach is useful for evaluating consensus (or lack thereof) among experts on a specific topic. In the course of this survey series, we asked experts to identify current and future biotic and abiotic threats to oaks, and then based on expert opinions, gauged the current and potential impact of these threats by asking a series of questions concerning, for example, their spatial and temporal manifestation. Data collected as part of this Delphi survey series will be used to support subsequent analyses aimed at assessing the economic impact of these threats, and may be useful for prioritizing the management of these threats within the Eastern United States.

Author information: Ellen V. Crocker, Postdoctoral Scholar, Department of Forestry and Natural Resources, Forest Health Research and Education Center, University of Kentucky, Lexington, KY 40546; Anna O. Conrad, Postdoctoral Scholar, Department of Forestry and Natural Resources, Forest Health Research and Education Center, University of Kentucky, Lexington, KY 40546; Xiaoshu Li, Postdoctoral Scholar, Department of Forestry and Natural Resources, Forest Health Research and Education Center, University of Kentucky, Lexington, KY 40546; Billy Thomas, Extension Forester, Department of Forestry and Natural Resources, University of Kentucky, Lexington, KY 40546; Thomas Ochuoeho, Assistant Professor, Department of Forestry and Natural Resources, University of Kentucky, Lexington, KY 40546; and C. Dana Nelson, Research Geneticist and Project Leader, Southern Research Station, USDA Forest Service, Saucier, MS 39574.