

Bacteria: Advancement of Control and Knowledge to Save Threatened Oak and Protect them for the Future Generations (Bac-Stop)

The Bac-Stop project is about stopping the spread of pathogenic bacteria that are causing damage and death of many native British oak trees. The project has four work packages with the objectives:

WP1: To investigate (a) beetle vectoring of pathogenic bacteria; (b) molecular and/or chemical factors that elicit the upregulation of bacterial virulence genes and (c) influence of bacterial volatiles on beetle behaviour to determine the role of the beetle in AOD.



WP2: Determining the effects of drought and nutrient stress on (a) oak health, (b) AOD disease establishment and (c) the oak microbiome under field conditions.

WP3: The values and attitudes of the public, forest and tree practitioners, scientists and policy makers on oak will be examined by engaging with citizen scientists, land managers, researchers and communicators as well as policy advisors to gather data guiding evidence-based decision making.



WP4: Bacterial cankers on a variety of tree species will be investigated to determine (a) the identity of the causal agents (b) analogues to AOD and (c) cross infectivity of the AOD bacteria and other novel species revealed in this study to obtain an idea of the host range of these pathogens.

