

Efficacy of Tree Establishment in Urban Environments

October 2020

Fund4Trees seeks proposals from researchers to explore the efficacy of tree establishment in urban environments.

Background

Many tree planting initiatives conducted in urban areas across the UK are supported by short-term capital funding, meaning that there may not be the resources and/or revenue funding needed to ensure successful establishment in the longer term. Published research has indicated a high failure rate of urban planting, for example 30% (Trees in Towns II; Britt and Johnson 2008). Urban tree charity Fund4Trees has identified more recent anecdotal evidence which indicates that this situation has not improved and that many trees planted in the urban environment either fail to establish or lack the potential to develop into large-canopied, healthy specimens capable of delivering the ecosystem benefits for which they were planted. Increasing climate change awareness has resulted in a plethora of politically-driven tree planting and urban greening initiatives, many of which appear to lack the long-term strategic planning required to secure success and longevity. Research is needed to quantify the scale of this problem, and identify the causes and potential solutions, to ensure that the funds invested in future planting initiatives deliver value for money and provide the ecosystem service benefits intended.

Fund4Trees invites tenders that propose suitable projects to conduct research that will provide reliable qualitative evidence which explore these issues. It is envisaged that the research will focus on the larger, public-funded schemes and/or those secured under planning conditions as part of development projects, that have been promoted as environmental improvement projects. Selection of projects should include a sufficient number and variety of projects to enable statistical comparison between success, partial success and failure. Planting schemes should have been completed at least four years previously to enable 'success' to be analysed.

The research proposal should define clear parameters in terms of scope and scale that take account of the budget, resource, time frame and geographical constraints that apply. It is accepted that additional similar research projects may be required to produce a national picture capable of influencing change.

Overview Criteria

- 1. Define 'success' in terms of the tree planting projects being assessed and the criteria against which the success will be measured.
- 2. Assess the subject planting projects in terms of the level of success to date and the potential for long term success i.e. potential to achieve maturity and deliver multiple ecosystem services in longevity.
- 3. Compare success rates in relation to project plans and implementation to identify potential reasons for success, failure and/or variable levels of success
- 4. Provide cost benefit analysis of the subject projects in relation to the project objectives and the limited financial resources for such projects

Methods

A range of approaches may be proposed, including a combination of desktop and field assessments, surveys among authorities (including freedom of information requests) and practitioners, citizen science, or others as appropriate.

Outcomes

It is a requirement that any findings are made available to the general public. We value academic outputs and respect the timescales involved in preparing work for publication, but we will also require some stakeholder specific outputs for public release on completion of the work where this does not hinder academic publication.

Fund4Trees also intends to propose the subject as a national seminar/conference topic based on the findings of the research.

Budget

Fund4Trees will support research with a grant of up to a maximum of £2,000. The trustees recognise that the scale of the funding available may restrict the scope and scale of the project and will look favourably on proposals which seek to match any grant funding provided with contributions from other sources.

How to Apply

- 1. On no more than four sides of A4, include details on the following:
 - a. how your proposal meets our requirements
 - b. who will be involved and why they are well placed to do this work
 - c. methods to be adopted and why
 - d. outputs
 - e. timescales specify/guide
 - f. value for money
- 2. A budget breakdown showing costs should be appended
- 3. Submit your application by email to: research@fund4trees.org.uk
- 4. There is no deadline for submission, but the trustees reserve the right to close this tender without notice.

Further Information:

The Fund4Trees Research Strategy can be found at: https://fund4trees.org.uk/research-strategy

Research Tender opportunities are posted at: https://fund4trees.org.uk/funding/research-tenders/