

REQUEST FOR PROPOSALS

COMPREHENSIVE LITERATURE REVIEW OF TREE BIOMECHANICS

SECTION I PROGRAM SUMMARY, BACKGROUND, AND PURPOSE OF THE REQUEST FOR PROPOSALS (RFP)

A. PROGRAM SUMMARY AND BACKGROUND

The International Society of Arboriculture (ISA) was founded, in part, as a means of supporting research in the care and management of trees, and as a means of facilitating dissemination of the research-based knowledge.

One of the primary initiatives of ISA's strategic plan is to promote and facilitate worldwide technology transfer. As part of this initiative, the Science and Research Committee (SRC) was formed, and support was provided with a new staff position, Science and Research Manager, in the Educational Goods and Services Department. One element of the SRC work plan is to initiate a series of literature reviews with the goal of identifying the frontiers of particular fields of arboriculture and disseminating this knowledge to the profession worldwide.

B. PURPOSE OF THE REQUEST FOR PROPOSALS

The arboriculture and urban forestry profession requires a comprehensive review of the research related to tree care and management. This RFP addresses one specific field of that profession: *Tree Biomechanics*. Topics will include, but are not be limited to: basic biomechanical principals; adaptive growth; tree failure; decay; wind and storm related loading; pruning; tree support systems; branch and root strength; measurement techniques and equipment; and more.

The first step in researching this topic is to perform a literature review to ascertain what is already known and what research has already been conducted. This Request for Proposals is for the performance of a comprehensive literature review of all relevant research to Tree Biomechanics

SECTION II MINIMUM QULIFICATIONS

All proposals received on or before the proposal due date and time and at the location specified in the Request for Proposals will be evaluated to determine whether they meet the minimum qualification requirements set forth in this Request for Proposals as follows:

A. Organizational Access

The successful bidder must have a means of accessing the relevant research and technical publications from appropriate sources that include and emphasize, but are not necessarily restricted to, refereed journals.

B. Researcher Qualifications

The successful bidder must have the educational background, knowledge, and skills necessary to conduct a literature review. This includes, but is not limited to the ability to:

1. Discern the difference between primary and secondary sources in research
2. Judge the rigor and scientific merit of research publications by evaluating the experimental design, data collection procedures, statistical procedures and analysis, and validity/appropriateness of conclusions drawn
3. Understand technical articles in refereed and non-refereed journals and assess their value and relevance to the review

4. Understand the needs of arborists and urban foresters in order to frame the literature review in the appropriate context

The successful bidder will have previously demonstrated the ability to review the literature as evidenced by successful completion of a graduate academic degree and/or appropriate scientific publications.

C. Communication Skills

The successful bidder must be able to communicate the results of this study in a well-written manuscript with comprehensive bibliographic citations, suitable for publishing (in English). The successful bidder may also be asked to present a summary of the results at the International Society of Arboriculture conference in the year following completion of the study.

D. Budget

The successful bidder must submit a proposal for all specified requirements within a budget cap of \$25,000

SECTION III SCOPE OF SERVICES

The successful bidder will be required to perform the following services:

- A. Perform a thorough literature search of all research related to Tree Biomechanics, including work published in journals not written in English. Although literature from many disciplines (such as forestry and engineering) will be appropriate to this broad topic, the successful bidder will need to clearly show the relevance and application of this literature to trees in urban areas.
- B. Prepare a literature review paper for publication in *Arboriculture & Urban Forestry* listing all research published (preferably primary sources in refereed journals) and summarizing previous work, trends that have emerged, research possibilities that have been overlooked, approaches that show promise or have proven sterile, and recommendations for further research. The summary should consider the quality, merit, and scope of various research studies, taking care to distinguish between peer-reviewed journal articles and publications in trade magazines.
- C. Prepare a summary article suitable for *Arborist News* magazine, summarizing the work and its relevance and applicability to practitioners in the profession.

SECTION IV PROPOSAL SUBMISSION REQUIREMENTS

All proposals must be received by the close of business CST 15 March 2010. PROPOSALS RECEIVED AFTER THE SPECIFIED DATE WILL NOT BE CONSIDERED.

Responses must address all of the program components and include the following four sections:

Program Plan/Narrative

The narrative must be a clear and concise program description that addresses the bidder's overall program content, methodology, program design, scope of services, ability to perform all required services, and comprehensive service plan. Each proposal should show a clear understanding of the needs noted in this RFP and demonstrate how the bidder's plan will meet the goals and objectives of this particular RFP. Bidders must demonstrate their understanding of the literature review with respect to other researchers in arboriculture and horticulture, as well as practicing arborists and urban foresters. Bidders must provide a

detailed description of the methods to be employed to accomplish the tasks as noted in this RFP. Proposals must contain a work plan and include but not be limited to:

1. Proposed time line or schedule
2. Key personnel involved in implementation
3. Outline of main topic areas to be covered in the literature review

Organizational Capacity

The organizational capacity should show evidence of adequate human, organizational, and technical resources and professional ability to meet the needs of this RFP. The organizational description must include but need not be limited to the following:

1. Resumes or curriculum vitae of key personnel.
2. A description of how the provider's internal monitoring system adheres to Generally Accepted Accounting Principles (GAAP).
3. Reliable access to the appropriate scientific databases and other sources from which literature will be accessed.

Demonstrated Effectiveness

Proposal must include a description of all prior experience in the provision of these or similar services. At a minimum, this description should include the background and experience of the bidder in providing these services. The proposal should instill confidence that deliverables will be met and that the bidder has sufficient expertise in the subject matter to conduct the review.

Budget

Proposal must include a detailed budget that stipulates how funds will be spent, including direct costs, salaries, wages and benefits, administration and overhead (if applicable), contractor costs, materials and supplies, and travel (if applicable).

SECTION V PROPOSAL EVALUATION PROCEDURES

All proposals accepted by ISA will be reviewed to determine that bidders meet all of the submission and minimum qualifications requirements prescribed in the RFP. An evaluation committee will evaluate and rate all proposals under consideration, applying the evaluation criteria described below.

EVALUATION CRITERIA

The following ratings will be used to evaluate the quality of each submitted proposal:

<u>Characteristics</u>	<u>Response Category</u>	<u>Desired Points</u>
Program Plan	Methodology, program design, scope of services, ability to perform all required services, comprehensive service plan, clear outline of topic areas	45 Points
Organizational Capacity	Evidence of adequate organization staff, resources (human, organizational, and technical), and professional ability to meet requested services; quality of staff, quality of staff resumes, allocation of staff.	20 Points
Demonstrated Effectiveness	Evidence of prior successful experiences in the provision of services, especially with respect to arboriculture	20 Points

or horticulture research

Budget Budget Plan, reasonableness of total cost and comparison with other proposals 15 Points

SECTION VI PROPOSAL PACKAGE FORMAT

1. The bidder shall submit a cover letter transmitting the proposal package to ISA. The cover letter shall be signed and dated by an authorized individual representing the bidder's organization.
2. Bidders shall include in their proposals a table of contents and page numbers. (Although there is no specific limit on the number of pages that applications may contain, applicants are encouraged to be as concise and succinct as possible, while adequately conveying their ability to undertake the proposed request.)
3. Each bidder must submit one complete original set and five photocopies of each proposal response. If submitted under separate cover, the envelope containing the original proposal should be labeled "Original Proposal," and the envelope containing the duplicates should be labeled "Duplicate Proposal". Each envelope submitted in response to the RFP **must be addressed as follows:**

TO: International Society of Arboriculture
c/o Science and Research Committee
P.O. Box 3129
Champaign, IL 61826-3129