

What Has the TREE Fund Done for You Lately?

by Laura Wyatt, TREE Fund Liaison

WAA has been good to the TREE Fund. For years, our chapter has met, and yes exceeded, the chapter challenge for raising funds that the TREE Fund uses in support of their mission to identify and fund projects that advanced knowledge in the field of arboriculture and urban forestry to benefit people, trees and the environment. Congratulations to WAA for once again reaching the platinum level (the highest) for 2008! A lion's share of what WAA contributed came through the *Tour des Trees* and the efforts of Team Wisconsin anchored by **Dick Rideout** and **Doug Drysdale** and supported by YOU! Thanks!

But what do you get in return? If you have attended any of the WAA or ISA conferences and participated in any of the educational programs presented by leading university researchers; you most likely are learning from research supported by TREE Fund grants. Most recently, at the annual conference in Green Bay, Dr. Ed Gilman from University of Florida mentioned numerous times how critical TREE Fund support was to funding his research.

The TREE Fund has awarded the following research grant awards:

John Duling Grants

The John Z. Duling Grant Program, named for one of the TREE Fund founders, provides seed money, up to \$10,000, for cutting-edge arboriculture research. There were 17 proposals submitted this year. Most were excellent, but due to financial limitations they could only select three to recommend for funding for a total of \$30,000. Two of the three grant awards are for Wisconsin research!

Controlled environment evaluation of aerated compost tea (ACT) – \$10,000

Dr. Laura Jull, University of Wisconsin–Madison

The proposed research will optimize ACT preparation for use in a controlled environmental greenhouse experiment which will allow control of highly variable environmental factors that naturally occur in the landscape. Varied rates of ACT will be applied to four commercially significant species of trees and shrubs and will be compared to conventional fertility practices.

Changes in soil microbial populations and functioning in managed urban landscapes – \$10,000

Dr. Les P. Werner, University of Wisconsin–Stevens Point

This project will characterize changes in the chemical, physical, and biological properties of soil exposed to the process of urbanization and urban landscape management regimes and will establish critical baseline information that will enhance the arborist's capacity to manage landscape trees and/or the urban soil that supports these trees.

Effects of container types and root pruning on root quality and tree stability – \$10,000

Dr. Edward F. Gilman, University of Florida

This research seeks solutions to root defects caused by container production by evaluating what root pruning strategy (slicing, shaving, bare rooting, or butterflying) works best.

Hyland Johns Grants

Named for TREE Fund founder and champion Hyland R. Johns, this grant provides between \$10,000 and \$25,000 to aid, stimulate and encourage scientific studies of trees in our community and urban forests. The TREE FUND awarded seven grants for a total of \$159,047 in 2008. Application deadline for 2009 grants is May 1.

Total effects of root pruning newly planted large landscape trees on decay, root regeneration, and stability – \$23,500

Edward F. Gilman, University of Florida

This project is designed to answer the questions: 1) Does removing root defects formed in the nursery increase tree stability after planting? and 2) Do roots of a certain diameter on large trees die back and decay instead of regenerating new roots?

The impacts of aerated compost teas on trees, soils, and the environment – \$24,912

Bryant Scharenbroch, The Morton Arboretum

The research will examine soil compaction and rates of Aerated Compost Tea (ACT) application, NPK fertilization, and a water control. It will assess above- and belowground tree response and soil biological, chemical and physical properties. Nutrient losses to the atmosphere and hydrosphere will be measured.

Measuring forces and stresses during rigging operations – \$25,000

Brian Kane, University of Massachusetts

Trees will be removed with conventional rigging techniques and forces, stresses, and dynamic motion of the tree will be measured. Data will be analyzed to develop both practical guidelines for climbers and a more robust physical model of the tree using finite element analyses.

Measuring breaking strength of climbing systems – \$25,000

Dennis Ryan, University of Massachusetts

An increasingly popular single-rope technique that employs a cammed ascender on a single rope will be tested for its strength when used with climbing lines.

Investigating physical soil conditions and tree response to permeable paving – \$10,635

Justin Morgenroth, New Zealand School of Forestry, University of Canterbury

This research will investigate the effects of permeable pavement on underlying soil conditions and the resulting whole tree response.

Can improved urban soil management result in increased soil carbon storage and greater tree growth? – \$25,000

Susan Day, Virginia Tech

Determine if soil restoration practices improve carbon storage and find the most economically viable and beneficial restoration treatment in terms of carbon sequestration and tree response.

Development of risk assessment criteria for branch failures within the crowns of trees – \$25,000

John Goodfellow, Consultant

Identify and manage high-risk branches resulting in a reduction of tree-caused damages, improvement in the safety of arborists, reduction of power interruptions, and improvement of the cost-efficiency of vegetation maintenance expenditures by cities and utilities.

CALLING ALL STUDENTS:

If you are a student or have a student working for you, encourage them to apply for a Robert Felix Memorial Scholarship. In 2008, TREE Fund awarded three \$3,000 scholarships to students pursuing careers in arboriculture. Applications can be downloaded off www.treefund.org. Deadline is May 1, 2009.