



Branching Out

A Newsletter of the Inland Urban Forest Council*

**Formerly the Inland Empire Urban Forest Council*

What's Happening to the Liquidambar Trees?

Fred Roth, Ph.D. Cal Poly University, Pomona and Consulting Arborist



Figure 1 Trees decline by death of individual branches.

Many American sweetgum or liquidambar trees are declining in inland Southern California due to infection by a bacterial pathogen that causes a disease known as "bacterial scorch." This pathogen is not new in California, but it is relatively new in liquidambar trees because of the introduction, about 15 years ago, of a new insect pest imported from the southern states called the glassywing sharpshooter, or GWSS as we affectionately call it. This insect, with strong sucking mouth parts, is able to extract sap from twigs of many plants much like an aphid feeds on leaves. In the process of feeding, it injects bacteria from an earlier feed into the vascular tissue of the new host. The bacteria multiply to such high numbers that they literally clog up the plant and water cannot reach the leaves. You may also have noticed a fine "rain" falling from your trees, particularly in winter. This is a kind of sap which passes through the insect during feeding. Studies of the effect of this sap leakage on humans has shown that any more than 4 droplets a minute is quite annoying even if you don't know it is bug poop. The bacterial disease had a much lower profile before the GWSS arrived because our native sharpshooter doesn't reach the huge populations that the GWSS does, probably because GWSS is not kept under control by a host of parasitic and predatory organisms found in its native ecosystems.

There is no control for the bacterial disease currently. The course of the disease in any individual tree is unpredictable. Some trees seem to die in as little as two years, while others in the same stand do not show symptoms for many years. Generally trees decline by death of individual branches at first (Figure 1). You may see many healthy leaves in a tree with major dieback.

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The Inland Urban Forest Council (IUFC) is a network of tree advocates that works to advance the sustainable management of trees in urban ecosystems of inland southern California, including portions of Riverside and San Bernardino Counties and eastern Los Angeles County.

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This is not a specific symptom and may be caused by several problems, but none of them are as widespread as bacterial scorch. Usually there are few symptomatic leaves even on a tree in advanced decline, but marginal scorch, or “burning” of the leaf tips and edges caused by vascular disfunction is the most common (Figure 2). You may also see some yellowing, but this is also common on liquidambar trees growing in alkaline soil.

Many important ornamental plants including oleander, purple plum, and olive are susceptible to bacterial scorch, but the greatest concern is for California’s grape and wine industries which are also likely to be affected. Efforts have been underway for some time to introduce biological controls for GWSS, but these have not been adequate to manage the populations of the vector yet. There is still hope as long as research efforts are properly funded. This is one of the things your tax money goes to.



Figure 2 Marginal scorch of the leaf tips and edges caused by vascular disfunction.

Attendance High at *Mature Trees* Lecture Series

Starting in April, IUFC sponsored a series of lectures on Mature Trees. Dr. John Kabashima, Orange County’s UC Cooperative Extension Director and research entomologist, kicked off the series in April with an update on recent exotic and invasive insect pests of mature landscape trees.

The series concluded in June with an all-day workshop entitled “Managing Trees in Their Golden Years.” Dr. Fred Roth spoke about the cultural management of mature trees. Mature trees face many challenges in the landscape not the least of which are site changes including soil compaction, reduced organic matter in the soil, nutrient depletion, and construction traffic.

Workshop attendees also heard from Rebecca Latta and David Roger, who spoke respectively about mitigating construction impacts to trees and how to evaluate when a tree isn’t worth saving. In the afternoon, Dr. James Downer gave a talk about root health and management practices.

The Riverside-Corona Resource Conservation District hosted the events. RCRCD is a local government agency that helps conserve the natural resources of areas within western Riverside and San Bernardino

counties. Workshop attendees were treated to a tour of RCRCD’s newly constructed interpretive garden during the lunch break.

Many thanks to our knowledgeable speakers. They created outstanding programing for our inland region.



Continuing Education Requirements

By Susan Sims, Sims Tree Health Specialists: Info@simstlc.com

Your Inland Urban Forest Council provides Continuing Education Units "CEUs" for those with professional licenses or certifications. Typically we hold quarterly workshops and annual seminars. At each of our workshops and seminars we offer International Society of Arboriculture (ISA) and Certified California Urban Forester (CUF) CEUs. CA Department of Pesticide Regulation (DPR) CEUs are available when subjects relating to pest control are offered. We welcome suggestions as to topics that are of interest to you.

International Society of Arboriculture

CEU requirements are due every 3 years.

Tree Worker	15
Aerial lift	15
Certified Arborists	30
Utility Specialist	36
Municipal	42
Board-Certified Master Arborist	60 (20 science, 20 practice, 20 management)

Certified California Urban Forester CEU requirements are due every 3 years.

30 CEUs (minimum 6 plant science, 6 Infrastructure, 6 Environment, 6 Management)

CA Department of Pesticide Regulation CEU requirements are due every 2 years.

Qualified Applicator Certificate	20 (4 laws and regulations)
Qualified Applicator License	20 (4 laws and regulations)
Agricultural Pest Control Adviser License	40 (4 laws and regulations)



Mark Porter (left), Deborah Day (right)

What Is A Tree Worth?

By Mark Porter

There are many reasons why it may be necessary to determine the monetary value of a tree. Various methods to assign a value for trees have evolved over the past 100 years. In North America, the Council of Tree and Landscape Appraisers (CTLA) provide guidance, methods, and standards of practice for tree appraisal. For the remainder of this article, please see: <http://www.inlandurbanforestcouncil.org> : Professional Development



Local Members Recognized

During last year's California Urban Forest Council (CaUFC) conference several of our local members were recognized with statewide awards. The City of San Dimas was given the Best Urban Forestry Award. (San Dimas's city Arborist is Deborah Day.) Dave Roger was recognized with the Fred Anderson Award for Outstanding Community Service. Dr. Fred Roth was given the Durrell Maughn Founders Award for Advancement of Urban Forestry Education. Diana Ruiz of the Riverside-Corona Resource Conservation District was awarded the Outstanding Urban Forestry Project of the Year for her efforts developing the IUFC newsletter.

The local IUFC chapter helped entertain the CaUFC 2010 conference attendees at Pechanga Resort with a presentation and tree that was configured on cardboard boxes. (Dave Roger kneeling, Fred Roth on right.)

Many thanks to Nancy Humenik-Sappington, Susan Sims, Rebecca Latta and Mark Porter for coordinating the fabulous program.

Upcoming Events

For questions, or to RSVP for IUFC events, please email IUFC2@aol.com

2011 Oct. 25 IUFC Workshop, Cool Tools for Urban Foresters and Arborists
 Speakers include Dr. Fred Roth, Cy Carlberg, and Susan Sims
 8:30 am—2:30 pm Hidden Valley Nature Center, a Riverside County Park
 along the Santa Ana River. Enter park at 11401 Arlington Ave., Riverside
 Register at: <http://www.eventbrite.com/event/2162004614>

2012 Quarterly Meetings are normally on fourth Thursdays: Jan. 23, April 24, July 24, Oct. 23
 All are welcome to join and help plan future activities.



The **Wildlife Aware** certification will soon be available to help tree workers avoid impacts to nesting birds and other native animals. Classes and certification will be offered through Sims Tree Learning Center. For more information, please contact Nicole at 951-685-6662 or Nicole@simstlc.com.

- Visit our new IUFC website at www.inlandurbanforestcouncil.org
- View the publication: **Trees Pay Us Back in the Inland Empire Region** developed by the Pacific Southwest Research Station, USDA Forest Service at http://www.fs.fed.us/psw/programs/uesd/uep/products/18/804uesd_uep_tpub_InlandEmpire.pdf
- **Urban Forest Management Tool Kit** <http://www.ufmptoolkit.com/>
- For a variety of links and resources, visit the **California Urban Forest Council (CaUFC)** website: <http://www.caufc.org/>

The IUFC:

- shares information that will help with the planning and management of community forests
- obtains and shares region-wide funding for urban forestry programs
- conducts educational field trips, tours, and workshops
- advocates for tree planting and care by supporting outreach events, such as Arbor Day and Earth Day.

The IUFC is one of seven regional councils in California. The Council advances regional concerns to the California Urban Forests Council, CAL-FIRE (formerly California Department of Forestry and Fire Protection), and the California Community Forestry Advisory Committee (CCFAC).

If you would like to join our free mailing list to receive announcements about upcoming programs, please contact us at IUFC2@aol.com or through one of our Steering Committee members listed below.

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