

Volume 5 Issue 4

Fall 2007



NORTHERN KENTUCKY URBAN & COMMUNITY FORESTRY COUNCIL

# Branching Out



## Northern Kentucky Urban and Community Forestry Council

INVITES YOU TO BE OUR GUEST

at our **ANNUAL FALL EVENT**

IMPROVING OUR URBAN FOREST THROUGH  
ARBORICULTURE

Guest Presenter - **BILL FOUNTAIN**  
Vice President, International Society of Arboriculture

**October 25, 2007**

Thursday Evening  
5:30 – 8:00 PM

Registration Required:  
RSVP (859) 572-7587 or  
[metzgerj2@nku.edu](mailto:metzgerj2@nku.edu)

Location:

Twin Oaks Golf & Plantation Club  
450 E. 43<sup>RD</sup> Street  
Latonia  
Covington, KY 41015

### Northern Kentucky Urban & Community Forestry Council's Trees In Our Communities Grants

The Council is in the process of revising the applications for its annual *Trees In Our Communities* (TIOC) Grant Program. The applications will be available at the Fall Dinner Event. In January, 2008 the Council will put on a training to explain how to meet funding requirements under the TIOC Grant Program. The due date for grant applications will be set for early in February, 2008.

Please check out <http://www.nkyurbanforestry.org> later in October to learn more.

# The Weather, the Plants and...Oh, My Goodness!

*Dr. Bill Fountain, Professor of Arboriculture,  
University of Kentucky*

The eastern US has seen wide deviations from normal climatic patterns over the past couple of years. Summer 2006 was wetter and milder than what was normal. The mild summer gradually changed into a mild fall and early winter with ample moisture. All of this was good for trees and other woody plants. Things began to change in February 2007 when the weather turned colder than normal. This wasn't a major problem because plants were at their maximum level of hardiness. March was refreshingly warm, almost hot after the cold weather of the previous month. One week even averaged 17 degrees F above normal. All of this changed the first week of April with record lows for an unprecedented length of time. The change from spring to summer brought record breaking high temperatures, drought, periods of low humidity and drying winds; all of which increased the evapo-transpiration rate.

The wetter than normal periods of 2006 often resulted in more shallow root systems because of low oxygen levels, especially on plants in heavy clay soils or poorly drained sites. Shallow root systems that were not mulched were more likely to be damaged as the brutally low temperatures of April penetrated the soil over several days. Shallow roots that survived were the first to dry out as the cold weather turned hot and dry. The April freeze also significantly damaged or killed actively growing cambium in trunks and branches of species that had been tricked into growing too early by the unusually warm March. This damage appeared weeks later as large strips of bark peeling off the trunk. The exposed xylem quickly dried preventing conduction of water and mineral elements and storage of carbohydrates essential for future growth.

As if this was not depressing enough for

a tree hugger and soil worshiper, the long, hot, dry summer further compounded an already dire situation. As moisture becomes increasingly limited, photosynthesis slows and eventually stops. Growth needed to replace tissues damaged in April could not occur. The 2007 annual ring of sapwood is smaller than normal further reducing a plant's ability to conduct sufficient water throughout the plant, especially as evapo-transpiration increases. The result is leaf scorch and minimal shoot elongation. At the same time sapwood begins to change to heartwood at a faster rate than in years of minimal stress. This new heartwood is functionally dead so does not conduct water or store carbohydrates.

Those able to irrigate may find that the evapo-transpiration rate exceeds the rate at which the plant is able to transport water to branch terminals. The resulting wilting can encourage over watering resulting in anaerobic soils favorable to root pathogens. Watering with gray water containing soap or detergent adds soil structure destroying sodium. Municipal water includes plant damaging chlorine and calcium which makes soils more alkaline.

No, we are not doomed to living in a desert wasteland void of all forms of plant life. All of this is a worse case scenario but is important to remember as we counsel clients and do diagnostic work over the coming years. There are several things the prudent arborists can and should do.

1) Of greatest importance is to always match the plant with the site and to remember that there is no such thing as a completely perfect and problem free plant.

2) A good Plant Health Care management system encourages preventing attacks by specific insects and diseases to certain plant species, especially when these

plants are stressed. Stresses include newly installed plants, plants damaged by construction, those growing in limited soil volumes such as tree pits or containers and those subjected to unusual environmental stresses like wind and reflected light/heat. These are targeted preventive sprays, not an endorsement of broad spectrum tank mixes applied to everything in the landscape.

3) Mulch. It looks good, adds organic matter to the soil, conserves moisture, moderates temperature, and makes good use of landscape "waste." But always remember, if some is good, more is not better!

4) Rain barrels make sense for conservation as well as improved water quality.

5) Rain gardens containing drought tolerant plants encourage people to continue gardening and at the same time reduces the storm water load on municipal sewer systems.

It is important to always remember that plants have survived on earth longer than we humans have been here. When plants fail in landscapes it is often as a result of our mistakes in locating them in a place where they can thrive. When you think that it is too hot or cold, wet or dry just remember; this is Mother Nature doing a little natural plant selection so that only the hardest individuals of a species are left to reproduce.

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## International Society of Arboriculture (ISA) Certified Arborist Training Workshop

Friday, October 26, 2007 8:00 a.m.—4:00 p.m.  
Campbell County Cooperative Extension Service Office  
3500 Alexandria Pike, Highland Heights, KY 41076

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This training program was planned to coincide with and prepare those wishing to take the Certified Arborist test offered on December 7, 2007 in Highland Heights, Kentucky. It is also open to arborists needing Continuing Education Units (CEUs) and others wishing to sharpen their skills, but will focus on teaching the materials essential to performing well on the ISA Certification Exam.

Dr. Bill Fountain, of the University of Kentucky, will lead the training program. Attendees are encouraged to bring their questions, samples and photographs related to any arboricultural concerns.

Registration is on a first-come-first-served basis, and limited to a total of 100 participants. Registration is required. Contact the Campbell County Cooperative Extension Service at

(859) 572-2600 to register. Cost is FREE. Approximately 6 CEUs potentially available.

For more information, or a copy of the complete agenda, contact DJ. Scully, U.K., Campbell County Extension Agent at (859) 572-2600 or [djscully@uky.edu](mailto:djscully@uky.edu).

### International Society of Arboriculture (ISA) Arborist Certification Examination

Location: U.K., Campbell County Cooperative Extension Service  
3500 Alexandria Pike, Highland Heights, KY 41076

Date: Friday, December 7, 2007

Time: Check-in = 1:30 p.m.  
Examination begins at 2:00 p.m.



**APPLICATION AND EXAM FEES DUE TO ISA TWELVE  
WORKING DAYS PRIOR TO THE EXAMINATION DATE. NO  
EXCEPTIONS. PRE-PAYMENT IS REQUIRED.**

For an application or more information please contact the ISA Certification Program at (217) 355-9411 or email [cert@isa-arbor.com](mailto:cert@isa-arbor.com). Website is [www.isa-arbor.com](http://www.isa-arbor.com).

**YOU CANNOT REGISTER TO TAKE THE EXAM THROUGH THE EXTENSION  
SERVICE. YOU MUST REGISTER THROUGH ISA.**

**NORTHERN KENTUCKY URBAN &  
COMMUNITY FORESTRY COUNCIL**

c/o Boone County Extension Service  
P.O. Box 876  
Burlington, KY 41005

Phone: 859-572-2600

*Creating an awareness about the value of urban  
forestry in Northern Kentucky Communities.*

**[ We're on the web!  
www.nkyurbanforestry.org ]**

**Rural and Suburban Permaculture**

**Saturday, November 3, 2007**

**9:00 a.m. to Noon**

**Campbell County Cooperative Extension Service**

**3500 Alexandria Pike**

**Highland Heights, KY 41076**

Join Mark Shepard, Consulting Agroforester, for a discussion on how to add value to your land through incorporating edible and woody landscapes for people and wildlife.

Space is limited—Registration is Required. Call (859) 572-2600 by October 26.

**Shiitake Mushroom Production Workshop**

**Tuesday, October 16, 2007**

**1:00 p.m. - 4:00 p.m.**

**Campbell County Environmental Education Center**

**1261 Race Track Road**

**Alexandria, KY**

Registration is limited. Call (859) 572-2600 by October 15.

- Participants will learn how to select trees to utilize for shiitake mushroom production, how to grow them, and about their nutritional value.
- Individuals will take home a log capable of producing shiitakes.