

Front Range Urban Forestry Council
July 22, 2010
Hudson Gardens

Introductions – David Flaig, City of Littleton

Plant Responses to the Fall 2009 Freeze Along the Front Range
Tim Buchanan, Fort Collins City Forester

A significant cold front hit Front Range communities on October 13, 2009 dropping temperatures into the teens during a relatively mild fall to that point. Many trees and shrubs were caught “off-guard” during this hard freeze event and Tim Buchanan shared what he has observed in the Fort Collins area with regard to tree responses.

He presented hardiness zone data (compiled in 2001) for the last century to demonstrate that Colorado’s climate often presents a hostile environment to grow trees. On October 13, 2009, Fort Collins started from an overcast high of 47 and dropped to the teens within a few hours. A slow warm up over next several days with overcast skies prevented further damage (sunscald, frost cracks, etc.)

Damage patterns seem to indicate that we were right on the verge of a major event that could have caused significant tree mortality. Trees with prior stresses and new plantings seemed most susceptible to damage from this event. Seed source is also a likely factor. Other factors discussed include use of species not reliably cold hardy and effects of growing site on hardening off (irrigated vs non-irrigated).

Tim said the lesson to take away is: we got lucky with this one. We really need to be more mindful of seed source and search for more northern seed sources, especially if future events are more severe. Look at the native range for a species and then select northwestern most area for seed source; north for cold hardiness and west for alkaline soils. Now is also the time to look for superior local seed trees, specimens that came through last year’s freeze with little to no damage. Things to evaluate when considering good seed trees: vigor, branch patterns, cold hardiness, soil adaptability, insect & disease patterns. Keep asking nurseries to grow new/good trees, and then try them out (ex: Defontaines cherry: beautiful flower, good apical dominance, good fall color, not messy with fruit, good street tree, came out of Cheyenne experiment station, not readily available yet through nurseries so keep asking.)

Break

Panel of Experts to Discuss Tree Species Selections/Observations

Tim Buchanan, City of Fort Collins
Tom Wells, City & County of Broomfield
Pete Zoschg, City & County of Denver

The panel shared information on what they have seen as a result of the freeze and also discussed tree species selections they are trying in their communities.

Broomfield: they have a lot of young trees but have only removed 160 trees to date this year. The total will likely reach ~250 out of 30,000 trees total. Of those already removed, most had previous mechanical damage or borer hits, 50 were white ash. Further drought stress and freeze injury finished them up. Catalpas have been variable.

Denver: phenomenal growing conditions last year may have been one of the downfalls, trees were still actively growing when October freeze hit. Several larger trees 8-15" diameter in tougher site but well-cared for and overall healthy up until last year were stone dead this spring. Many oaks died back to main stems. Hardy rubber trees came through quite well. From last year's street tree planting projects: Regal prince oaks did fine, sweetgums doing ok. Amur mackia have a little dieback but are otherwise good. Noted random dieback on ash and maples.

Fort Collins: have just a few hardy rubber trees planted around city but they came through fine. Pacific Sunset maple, a hybrid between Norway and Shantung maples, is this year's select tree evaluation species. Older specimens looking pretty good, might be a good selection for the future. State Street maple (*Acer miyabi*) in Tim's home landscape had no freeze damage. Newer elms (Emerald Sunshine, David, etc.) doing reasonably well, though Aurora lost most of their new Emerald Sunshine elms to April freeze.

Questions/comments from audience:

Japanese pagoda tree planted in downtown Denver areas, what is their overall impression so far? Pete Zoschg said it's a decent tree but weak branch unions make it prone to breakage. Mike McGill noted that smaller pagoda trees (<3") are highly susceptible to cankers and often come from nursery already infected. Erie had more success with planting larger canker-free specimens (>3").

Kentucky coffeetree: leaf out late, drop leaves early. David Flaig has had really good luck with ones he's planted. Nobody had anything really negative to say.

Erie: black tupelo, anybody else tried? They've tried a few in wetter spots, doing very well. Parker arboretum has a few, looking a little thin but still hanging in.

Bosnian pines: good success. Smaller and slower growing than Austrian. Planting out in some pretty tough sites and they are doing very well.

A green industry collaborative group is working on list of recommended tree species, hope to finish final draft by end of year. Considered 100+ species/cultivars to rate 1-4 (recommended, conditional, not recommended, other?) for use in urban areas. Plan to make it a dynamic type of list to incorporate feedback and future revisions as more data becomes available. ISA has a tree list of common species for every state, approx. 94 species for Colorado.

Committee Reports

Insect and Disease / Emerging Pests Subcommittee – Ralph Zentz, City of Fort Collins

A recap from discussions at July 14 meeting: Dutch Elm Disease is still low this year with only three trees so far in Fort Collins and none in the other communities represented at the meeting. Poplar vagabond aphid samples were brought in and Whitney was impressed with the amount of symptomatic foliage clumps. Mountain pine beetle in our communities appears to be less than last

year in terms of number of dead trees showing up this past spring and early summer. Heavier flights are expected to begin soon and go well into the fall. Thousand cankers disease has been found in a few more communities this year. It has been confirmed in Lyons and some checking is to occur on a few symptomatic trees in Loveland. There was a report of a butternut dying back in Wheat Ridge, but it turned out that the tree was actually a black walnut. Also, Ned checked some *Juglans microcarpa* in the Denver area that had some dieback symptoms, but he could not find the beetles or the fungi. Ned is beginning to think that the cold winter may have hurt the walnut twig beetle population...more to come. Elm flea weevil was a big topic for all the arborists present. They seem to be gaining in population and control efforts have not been too effective yet.

Select Tree – Tim Buchanan, City of Fort Collins

No comments.

Hazard Tree – Bill Cassel, City & County of Denver

No comments.

Program/Membership – Keith Wood, CSFS

Thank you to Kathy & Hudson Gardens for hosting the July FRUFC meeting, beautiful site! Free admission to meeting attendants today, take a walk around and check out the gardens! Next meeting is September 16, possible location at CSFS Nursery in Fort Collins or maybe Cheyenne, Wyoming research station. Who could attend an out-of-state meeting?

CTC – Neal Beamsberger

2011 Trees Calendar is wrapping up soon and will be available in a couple months. Buy in bulk @ \$4/each (over 25.) They make great gifts!

ISA – Bill Cassel for Rob Davis, City & County of Denver

Tree appraisal workshop 2 weeks ago: low attendance due to cost and advanced topics. ISA is planning a more “nuts and bolts” class, look for more info in future. ISA workshop Sept 30-Oct.1. Tree climbing championship Oct. 2 in Washington Park. Harv Teitelbaum will be there to provide recreational tree climbing opportunities on same day as championship. See website (<http://www.isarmc.org/pro/index.htm>) for schedule of classes and events.

Loveland tree worker “fly-by-nighters” distributing business cards with logo “Tree Guys”, ripped off elderly lady by doing \$125 worth of tree work and charged her several thousand. They are being prosecuted. There might be opportunities to promote professional arborists by offering repair work for those who were ripped off, anybody interested?

Community Reports

Keith Wood for Gertie Grant – Trees Across Colorado/CTC

Gertie would like feedback on trees you’ve gotten from her that work well and you like. She would also like your suggestions for new trees to try but prefers to focus most on drought-tolerant species. A list of drought tolerant species for Colorado can be found at <http://csfs.colostate.edu/pdfs/droughttrees.pdf>. This document is probably past due for an update, send your suggestions for additions/deletions to keith.wood@colostate.edu.

Message from Gertie:

Here is a "quickie" on how I choose trees for TAC, sprinkled with some personal preferences from my urban walking in Denver, not necessarily in the order listed. Note that at this point, TAC is only getting deciduous trees, only because that has been my experience starting with Denver Digs trees which only did street trees. I'm open to trying evergreens if the logistics can be worked out.

1. I am aware that I am dealing with a very wide range of communities with different needs, soils, heat, wind, etc. Therefore, each year there are repeats on my list that may seem unadventurous and boring to some but for a community that is trying TAC for the first year, old reliables like bur oak and hackberry may be good bets.
2. I try to keep at least two-thirds of the trees ordered by TAC from the drought tolerant species list, but there are some trees I include that survived the dry spell in 2002-3 along Denver streets where I know they were getting no water for several years, like lindens. I believe most of the TAC trees will be in at least moderately irrigated areas.
3. I avoid trees that are discussed at the pest group meetings like Black Walnuts and all ashes. I also no longer get Purple Robed black locusts because folks from CTC have told me that they have problems.
4. I find out what the Denver Forestry folks would like to see "on Denver streets or parks" and try to get them from the suppliers that we both use. I work fairly closely with the eastern Oregon growing station of Schichtels Nursery (ordered through The Tree Farm in Longmont) where I have a long standing relationship with the man who runs it, Gary Worley. They are in a part of Oregon that has high alkaline soils, high, dry heat in summer, hard cold in the winter and dry weather so they irrigate a lot. Schichtels has met with Denver Forestry staff and me in the past to find out what Denver and TAC would like to see in two or three years. From those meeting have come some trees that Schichtels is growing now with no guarantee that either Denver or TAC will purchase them. They have challenges like finding seed sources. They also have some of the same weather challenges we have like early frosts and some of their trees that I would like to get are in short supply.
5. I know there is a demand for trees that are purely ornamental (Eastern Redbud) that are not drought tolerant but people love them. Cities keep ordering them from TAC. My own personal taste is that every block or park needs some burst of color at different times of the year and a whiff of glorious sweetness (like linden flowers) to get folks to look up and wonder and smile. The stress of city life needs relief and our souls thrive from those surprises.
6. I currently use two growing sources but order through local nurseries or brokers. Any of you who have witnessed the unloading process have seen how complicated it is with trucks from two sources and adding the third may make unloading more time consuming for the groups picking up trees and therefore increase the staff costs to those groups.
7. When I am dealing with a new group that is not headed up by a town forester, I strongly urge them to contact their local state or city forester to make sure they are choosing trees from my list that are more likely to survive in their locale.

Sonia John – FANS of Washington Park

Sonia presented the new Washington Park tree guide, released April 17, 2010. This project was funded by a CTC grant and private donations. The guide features 76 tree species located in Washington Park with 3-4 paragraphs on each species. It sells for \$8 (including tax) and is available at several local businesses in the Wash park area. Proceeds from sales will go towards printing more guides with left over funds used to purchase new trees to plant in Washington park. It is a user

friendly guide written in non-technical language for enjoyment by lay-person and professional arborist alike! For more info, visit their website at www.fanswashingtonpark.org.

Susan Ford – USFS

Jan Davis is the new national Forest Service Urban and Community Forestry Program Assistant Director in DC. She comes from Texas. National Get Outdoors Day has come and gone for this year (June in Denver City Park) but she mentioned a new initiative for next year called the Children's Forest (a string of sites focused on youth.) Those interested in learning more about the projects can email Susan at sbford@fs.fed.us or call 303-275-5742.

City & County of Denver

City Arborist Pete Zoschg is leaving Denver to move back to Pennsylvania. Send your well-wishes to Pete!

Denver Pest Group Meeting

The Denver Pest Group meeting followed the FRUFC meeting with a recap of what was discussed at the Northern Colorado Pest Group meeting in Fort Collins on July 14. Attendees also shared local information and got updates on what's happening with insect, disease, and environmental issues in the Denver Metro area.

Attendance

David Flaig	City of Littleton
Keith Wood	CSFS
Andy Schlosberg	CSFS
Collin Wassink	CSFS
David S. High	City of Golden
Paul Smith	City of Colorado Springs
Bill Cassel	City & County of Denver
Keith Worley	ISA-RMC
Kyle Sylvester	City of Brighton
Neal Bamesberger	Hudson Gardens
Ken Fisher	City of Boulder
Kendra Nash	City of Boulder
Susan Ford	USFS
Scott Grimes	South Suburban Parks & Recreation
Joe Prante	South Suburban Parks & Recreation
Ben Rickenbacker	South Suburban Parks & Recreation
T.J. Crane	South Suburban Parks & Recreation
Matt Romero	South Suburban Parks & Recreation
Jeff Roberts	South Suburban Parks & Recreation
Jennifer Hrobar	South Suburban Parks & Recreation
Chuck Gehringer	City & County of Broomfield
Chris Tonelli	Town & Country Trees
Dan Odell	TC Woods Lafayette
Jacque Chomiak	City of Aurora

Natalie McNeill
Renita Baskin
Robert Bond
Renaë Einspahr
Vivian Smolke
Michelle Cadena
Sonia John
Melanie Feddersen
Kathy Rediske
Roxanne Velasquez
Adam Pena
Scott Rehfeld
Mike McGill
Devon Bowers
Laurel Brabec
Mara Fielding-Purdy
Matt Moritz
Randi Smith
Michael Allen
Tom Wells

Davey Tree
Independent
Student
CMG
CMG
Fort Collins Wholesale Nursery
Fans of Wash Park
Hudson Gardens
Hudson Gardens
US Fish & Wildlife
Xcel Energy
Town of Erie
Town of Erie
City of Westminster
Student
City & County of Denver – Forestry
Arvada
Arvada
Mile High Youth Corps
City & County of Broomfield