



# Earth Team Volunteer Newsletter

## October 2009



**Tulsa County Conservation District  
USDA Natural Resources Conservation Service  
Tulsa County Blue Thumb**

### Volunteers Show Support During Little Joe Creek Cleanup

The Tulsa County Conservation District's 15th annual Creek Cleanup was focused on Joe and Little Joe Creeks this year. A tributary of Little Joe runs through LaFortune Park. This flows into Joe Creek, which then makes it's way into the Arkansas River around 81st and Riverside. "We're trying to focus on floatable and plastics bobbing on top of the water," conservation program specialist Scott Grant said. It rained last year, and the effort didn't have as many volunteers as we had hoped, but we still managed to remove nearly 1,000 pounds of trash — including a sofa and futon — from the stream. This year we collected enough trash to fill a 20 foot roll of dumpster. Memorial High School students, in addition to any able-bodied volunteer who wished to help, were part of the effort to make Joe and Little Joe Creeks a little more clean. The event was also a learning event on reducing stormwater pollution. TCCD volunteer Heather Crain gave a very informative presentation about flooding in the Tulsa area and what measures had been taken to safeguard the community. Little Joe Creek is an urban stream that picks up a lot of debris from park users and residents. Cigarette butts, trash overflows — it all winds up in the creek, he said. A lot of urban wildlife, including herons, ducks and bats, depend on the water source, and the variety and amount of small insects, macroinvertebrates, living at the bottom of the stream indicate the quality of the water, Grant said. "The more and different kinds of bugs we find, the better it is. It's a good clue as to what's going on in the water," he said. We were able to showcase some of the aquatic macros that were living in the stream to volunteers who helped with the event. Panera Bread, QuickTrip Kitchens, and Whole foods helped to supply breakfast, while Gary Bishop, NRCS District Conservationist, helped to grill up hotdogs for lunch. He was a fantastic grillmaster. All of the volunteers had a great time and it was fun to work with old and new volunteers alike. The effort will make a dent in the amount of trash making its way into the creek, but the message taken home from the event will help out event more. We would like to say "Thank You" to all of the sponsors and donors that made the event possible: Memorial High School, City of Tulsa, NRCS, Oklahoma Blue Thumb, AEP-PSO, Walmart, Incredible Pizza, Applebee's, The Brook Restaurant and Bar, Cheesecake Factory, Chili's, Domino's Pizza, El Guapo's Cantina, Gilcrease Museum, Local Market, the M.e.t., Mimi's Café, On the Border, Panera Bread Co, Philbrook Museum of Art, QT Kitchens, Reasor's, Starbucks, Target, Tulsa Golf, Tulsa Parks, Tulsa Zoo, Water on the Run, and Whole Foods.

→ All the volunteers are attentive during Heather Crain's presentation



↓ Walter Jobe "relished" his time at the event.



↓ Brian Wester talks to some young volunteers about life in the creek.



↓ Our volunteer group that picked up the most trash led by Scott Stephens





**Chad Burden was slated to be our speaker on Oct 1st, but now has a conflict with a class at OSU. His LEED AP, Lorrie Hoefling, also the President of the US Green Building Council Oklahoma Chapter, will be joining us to talk about their work on the green remodel. We are excited to have her speaking with our volunteers! Program Begins at 6 PM**

**We will be having Blue Thumb QA sessions at 11 AM and 7 PM. I hope to see lots of you there. Bring your monitoring Kits!**

### Environmental Word of the Month

**Vertical farming** is a proposal to conduct large-scale agriculture in urban high-rises or "farmscrapers". Using recycled resources and greenhouse methods such as [hydroponics](#), these buildings would produce fruit, vegetables, edible mushrooms and algae year-round. Their proponents argue that, by allowing traditional outdoor farms to revert to a natural state and reducing the energy costs needed to transport foods to consumers, vertical farms could significantly alleviate climate change produced by excess atmospheric carbon.

[Dickson Despommier](#), a professor of environmental health sciences and microbiology at Columbia University in New York City, developed the idea of vertical farming in 1999 with graduate students in a medical ecology class. In an interview with Miller-McCune.com, Despommier described how vertical farms would function:

"Each floor will have its own watering and nutrient monitoring systems. There'll be sensors for every single plant that tracks how much and what kinds of nutrients the plant has absorbed. You'll even have systems to monitor plant diseases by employing DNA chip technologies that detect the presence of plant pathogens by simply sampling the air and using snippets from various viral and bacterial infections. It's very easy to do. Moreover, a gas chromatograph will tell us when to pick the plant by analyzing which [flavonoids](#) the produce contains. These flavonoids are what gives the food the flavors you're so fond of, particularly for more aromatic produce like tomatoes and peppers. These are all right-off-the-shelf technologies. The ability to construct a vertical farm exists now. We don't have to make anything new."

Mass media attention began with an article by Lisa Chamberlain in *New York* magazine. Since 2007, articles have appeared in *The New York Times*, *U.S. News & World Report*, and *Popular Science*, among others, as well as radio and television features.

Architectural designs have been produced by Chris Jacobs of United Future, and show how these "farmscrapers" would appear in the urban environment.



**It's That Time Of Year Again!  
And Your Help is Needed.**

**The magical night of giving at the Tulsa Promenade Mall is how we raise funds to provide volunteer awards, gifts, recognition, food and beverages at different times throughout the year. When we sell tickets in advance for \$5.00 we get all of the proceeds. If you can help sell or would like to buy some tickets please let us know.**

**What is "Magical Night of Giving?"**

"Magical Night of Giving" gives local non-profit organizations a chance to raise money. The mall will close to the general public, and then re-open for a night of shopping. The evening will include special store discounts, gifts, door prizes, entertainment, and free gift wrapping to make customers feel like a million bucks. Non-profit groups sell tickets to this fun event. **The groups keep all the funds generated by selling the \$5 tickets.**

**When is the event?**

Sunday, November 15, 2009. 6:30pm-10:00pm

**How does "Magical Night of Giving" work?**

Area non-profit organizations have been invited to sell tickets to this exclusive shopping event. The mall will close, then reopen at for ticket holders ONLY. Each ticket holder will receive a list of special discounts offered only to them and valid that evening only at participating stores.

**Magical Offers:**

Stores will be offering special discounts for ticket holders valid that night only, offering a free gift, having an in-store drawing for a prize and/or offering refreshments. In addition, we will have spaces for local vendors to set up throughout the mall. Please contact Kelly Wilkerson at 627-9282 for more information.

**Holiday Entertainment:**

Tulsa Promenade will provide holiday entertainment to add to the festivities for the evening.



## Rain Couldn't Stop All the Summer Macro Collections—Just Most of Them

The rainy weather had an impact on this year's macro invertebrate collections on our Tulsa area creeks. The macro collection had to be rescheduled twice due to rainy weather. Rains during the first week in September made it hard for us to get all of the data that we are accustomed to getting. During a normal macro collection for a stream site, we are collecting data about the physical appearance of the stream site, weather data at the time of collection, macroinvertebrates from the stream substrate, timed flow of a semi-submersible object, and width and length data to calculate volume of flow. We were not able to get any flow measurements from the sites due to higher than normal water levels, but we were able to collect information about the physical state of the site and some bugs for a few of the sites. The collections had to be finished by September 15th, so we were getting down the wire. The collections that we were able to make will help us to get some needed data for the sites and we will try again this winter for the sites that we were not able to collect due to the rains. We will be needing volunteers in October to pick through the samples that were made this summer. If you would be interested in helping out with that, please let us know. Thank you to City of Tulsa employees Damon Morris, Kathryn Spencer, Walter Jobe, and Jeff Woolard for their help on Thursday. Thanks to those of you who offered to help on Friday, but got rained out.



# Calendar of Events

## **Blue Thumb Volunteer Monitor Training**

Become a certified Blue Thumb water quality monitor. One day will be spent in the office learning why and how we do the chemical testing and the other day will be spent playing in the stream learning how to take samples and what to look for at your site.

September 26th-27th 8 AM—4:30 PM

TCCD Offices

Call 280-1595 or email at

[tulsaccd@conservation.ok.gov](mailto:tulsaccd@conservation.ok.gov)

## **Earth Team Volunteer Meeting and Blue Thumb QA Session**

Blue Thumb QA session will be held at 11 AM and 7 PM and the quarterly Earth Team meeting will be held at 6 PM at the district office. Guest speaker Chad Burden will be speaking about green building and his green remodel project.

Oct 1<sup>st</sup> 10 AM, 6 PM, and 7 PM

## **Tulsa State Fair Booth**

We need volunteers to man our booth at all times during the fair to assist patrons with any questions that they may have and to help distribute some literature.

October 1-11<sup>th</sup> 10AM – 10 PM most days

## **Okmulgee CCD Natural Resource Day**

We will be assisting Okmulgee CCD with an educational event at the Southern Mansion outside of Okmulgee. The topic of this event is water.

October 23rd from 9 AM - 3PM

## **Volunteer Christmas Party**

It's never too early in the year to put a Christmas Party on the calendar! We will be having our usual potluck party where the district provides the proteins and you bring a side dish. A game of Dirty Santa will also take place.

Dec 8<sup>th</sup> from 6-8:30 at OSU Extension

4116 E 15<sup>th</sup> St Tulsa, OK 74112

## **Volunteer Notes**

→ Thank you to all the volunteers who came out and picked up trash at our 15th annual Creek Cleanup. This event, held at Memorial HS, was both fun and educational. We were glad to have such a great turnout to the event. We look forward to hopefully seeing everyone at next year's event!

## **Welcome Our New BT Volunteers**

Class of 09

We will provide more info in the next ET addition!



## **Nobel Laureate Norman Borlaug Passes Away at 95**

**Norman Ernest Borlaug** (March 25, 1914 – September 12, 2009) was an American agronomist, humanitarian, and Nobel laureate, and has been called the father of the [Green Revolution](#). Borlaug was one of only five people to have won the Nobel Peace Prize, the [Presidential Medal of Freedom](#) and the [Congressional Gold Medal](#). He was also a recipient of the [Padma Vibhushan](#), India's second-highest civilian honor.

During the mid-20th century, Borlaug led the introduction of high-yielding varieties of wheat combined with modern agricultural production techniques to Mexico, Pakistan, and India. As a result, Mexico became a net exporter of wheat by 1963. Between 1965 and 1970, wheat yields nearly doubled in Pakistan and India, greatly improving the food security in those nations. These collective increases in yield have been labeled the Green Revolution, and Borlaug is often credited with saving over a billion people from starvation. He was awarded the Nobel Peace Prize in 1970 in recognition of his contributions to world peace through increasing food supply.

*The Earth Team Newsletter is published by Tulsa County Conservation District, 5401 S. Sheridan Rd., Suite 201, Tulsa, OK, Phone: (918) 280-1595. [Tulsaccd@conservation.ok.gov](mailto:Tulsaccd@conservation.ok.gov) Tulsa County Conservation District and USDA Natural Resources Conservation Service are equal opportunity providers and employers. Visit the web site at [www.tulsacountyconservationdistrict.org](http://www.tulsacountyconservationdistrict.org)*