

THE OKRA NEWS

OKLAHOMA RECYCLING ASSOCIATION

December 2015

Welcome to the OKRA online newsletter. Please feel free to share our newsletter with anyone who might enjoy reading it. To receive electronic notification of newsletter availability and general recycling announcements, sign-up for the OKRA list server on our website: www.recycleok.org

Moore's Microwaves Take 2nd at FIRST!

By Shannon Brackeen

Moore Oklahoma's FIRST Lego Robotics Team, "The Microwaves," is made up of kids 9-12 years old, in 4th-6th grades from two Moore Schools, Broadmoore and Timber Creek. Every year, the FIRST competition has a theme Challenge. For the Project Challenge this year, the theme was Trash Trek. Teams were encouraged to study a problem involving trash and develop a unique and original solution to the problem. For more information about the challenge, see <http://www.firstlegoleague.org/challenge/2015trashtrek>.



Recycling:

The Microwaves are working with partners at the City of Moore and Republic Recycling Services to organize a pilot program for schools in Moore. According to the plan, Broadmoore will be the study site for reducing waste in schools. The Microwaves idea will be part of the program. Republic will provide a container and pick up for all of the recycling products under the Single Stream program. If proven successful, the Microwaves will make a proposal to the Oklahoma Sustainability Project for funding to continue the program.



The Solution:

The Microwaves noticed that school cafeterias produced a lot of waste. After studying the problem, they concluded that cardboard, individual-sized milk and juice cartons made up the bulk of that trash. By emptying and crushing those cartons, they can reduce the volume of their school's trash by up to 96%, and also prepare them for recycling. This saves the school money, since schools are charged every time garbage dumpsters are emptied. The Microwaves designed a system, called the "Wash & Squash" which rinses and crushes cartons and can be safely utilized by children in school cafeterias. They made a YouTube video to introduce the idea to the kids at their schools and get their opinions. Their prototype is made from materials around the classroom and it does not include the rinsing component, but it's a fun video to watch and it gives you the general idea (<https://www.youtube.com/watch?v=VdDeJ8C8YH8>).

The Microwaves won 2nd place at the FIRST regional competition with their project presentation. Although they didn't qualify to continue on to the state tournament, they still plan to pursue the project. As the Microwaves told head coach, Shannon Brackeen, "That's OK, it's not about what we win, it's about what we did and what we learned!"

In the future, the students hope to get on Shark Tank and start a Kick Starter campaign!

**Great Job
Waves!**

Oklahoma's Top Recyclers Honored at Awards Banquet

The Tulsa Metropolitan Environmental Trust (The M.e.t.) hosted their 14th annual America Recycles Day (ARD) Awards Banquet on Thursday, November 12th. At the event, award winners from across Oklahoma were recognized for their recycling efforts.

Congratulations to the following 2015 ARD award winners!

Green Event: Tulsa Earth Day; Celebrate CommUNITY—Katherine Anderson. This event brings together students, teachers, organizations and businesses to celebrate, inform, educate and energize the community about the environment.

Recycling Reporter: Beth Turner Author of the recycling column, "Trash talk," Beth covers recycling news in the community with a positive focus on current efforts vs. how much still needs to be done. She balances out her column with recycling education since she realizes this is the main proponent of positive change.



M.e.t. Chair Michael Willis with Beth Turner

Recycling Entrepreneur: Miller Environmental Transfer—Todd Ray, Mike McDonald, and Monica Neeley The first business of its kind in Oklahoma, Miller's mission is to help companies shift disposal from traditional landfill avenues to recycling, waste-to-energy and ultimately zero landfill.

Green School: Peters Elementary Green Team This team of students love all things recycling and are dedicated stewards of the environ-

ment. Peters received their Oklahoma Green School flag in 2013 and presented at the Green Schools Conference for two consecutive years. Peters team also gave a presentation at the 2015 OKRA recycling conference (see page 4).



M.e.t. Chair Michael Willis with Chasity Gray, Beth Meyer and Mia Hodson from Peter's Elementary Green Team

Lifetime Recycling Achievement: Michael Patton, former Executive Director of the

M.e.t. Michael has a long history of championing recycling initiatives. He served on the original committee that created Oklahoma's first recycling plan in the 1980s and was the state's first Recycling Coordinator. He implemented recycling centers in Tulsa County, staffing them with individuals with disabilities, and established the yearly Enviro Expo where "green minded" businesses and organizations meet to educate and enlighten the community about recycling and other environmental issues.



M.e.t. Chair Michael Willis with Michael Patton

Winners of ARC Poster Contest

The winners of this year's Ada Recycling Coalition's America Recycles Day "What Can I Put in the Big Blue Bin" poster contest for local elementary school students are:

- ♦ Pre-K (Ada Early Childhood Center)
Gabriella Grand, Jett Brunson and Kaitlyn Woods
- ♦ 1st Grade (Hayes Elementary)
Dyson Palmer and Marquis Easley
- ♦ 5th Grade (Willard Elementary) - Faith Stout

Winners received \$25 and a reusable shopping bag.

**congratulations
Winners!**



Pictured with the artists are: Trudy Nevland, Marilyn Ellis and Glenda DeShazo (ARC) and Kathy Evans (Pre-K Teacher)

ARC Collects Paint at Ada's HHHW Event

The Ada Recycling Collection (ARC) collected and mixed usable latex paint during the City of Ada's annual Household Hazardous Waste event in November.



The paint (at right) was taken to the Chickasaw Nation's ReUse Center in Ada where it will be given away to anyone needing it.

The ReUse Center is located at 2205 North Broadway in Ada. The public can drop off items any day during the week, and they are open on Tuesdays and Thursdays for the public to shop for free.

The Center helps keep reusable items out of landfills. They also give price-conscious customers a way to find unique items for personal use. They accept new and gently used items. It is free to drop off or pick up items at the center and all services are open to the public. Items accepted are: Building materials (lumber, doors, windows, siding, flooring, etc). Household items (furniture, appliances, electronics, cleaning products, pesticides, paint, etc.). Misc. items (lawn and garden supplies, office supplies, pet care products, etc.).



The ARC collected:
6,746 lbs of paint
59 5-gal cans
331 1-gal cans
162 quarts
39 Spray cans



OKRA Hosts 8th Annual Recycling Conference

Oklahoma recycling enthusiasts and vendors came together October 20th for the 2015 Oklahoma Recycling Conference, *Taking it Back, Making Recycling Work for Oklahoma*, which was held at the University of Oklahoma Schusterman Center in Tulsa. The day began with a welcome by OKRA President, Traci Phillips, who gave a brief description of OKRA and its mission and goals.



The first speaker was Robert Pickens, American Waste Control, who gave a rundown on recycling markets and their impact on Oklahoma. Robert said that commodity markets have been rocky over the past year and there have been downward shifts in markets that have historically been very stable. Much of this shift is due to China pulling out of the recycling markets. Robert encouraged us to keep recycling and he provided information on local markets.

Next, Scott Cassel, president and founder of the Product Stewardship Institute (PSI) described the work of the PSI and how they could benefit recycling in Oklahoma. Scott said that the goal of product stewardship is to reduce health and environmental impacts from products across their lifecycle. PSI researches problems, brings all stakeholders together and develops model legislation. PSI supports EPR (Expanded Producer Responsibility) programs.



Some of these are mandated by law, such as the one Oklahoma has for electronics. Other programs are voluntary, such as Oklahoma's programs for thermostat recycling (39 locations at Locke Supply stores), Call2Recycle battery recycling, and Tires4ward. Scott said that successful EPR programs have elements of convenience,

awareness, and incentives. Currently the PSI is working on groundwork for mandatory product stewardship for paint manufacturers. This would result in a cost benefit of about \$1.6 million/year. After Scott's presentation, Fenton Rood joined him at the podium and they entertained the crowd with their rendition of Woody Guthrie's classic song "I Aint Got No Home."



Conference attendees are attentive as Scott Cassel speaks on Product Stewardship in Oklahoma

Next up were presentations from students from two Oklahoma Green schools. First to present were Peters Elementary Green Team members Beth Meyer, Kennedy Salinas, Grayson Tempest, Lauren Hemm and Jenaya Monroe. They said that Peters started recycling in the late 1990s with the Abitibi Paper Retriever. Two years ago, 4th Graders investigated how to recycle more materials.

They found it would be costly to recycle other items, but the cafeteria workers were so dedicated to recycling that they began taking cardboard home to recycle it. Then, the school's art teacher, Mrs. Salinas, found a way to recycle old markers, which are collected and shipped to Crayola. In the fall of 2014 Peters was able to greatly expand their recycling program when Mr. Murph (Tulsa Recycle and Transfer) bought out Paper Retriever. They started recycling plastic, metal and cardboard. Thanks to a grant from the ODEQ, they were able to purchase new bins and large wheeled containers for transporting recyclables to the bins. Peters is recycling more every month! However, because of the downturn in the recycling markets, they are no longer paid for recycling and have to pay for their own bins. They want recycling to increase and have always encouraged neighbors to use their bins, but now they also have to calculate the cost. Peters' goal is to make recycling an everyday thing, and students are developing the habit of recycling at home as well as at school.

Next, Megan Mathews and Brooke Kester described the recycling program at Clyde Boyd Middle School (CBMS) in Sand Springs. The program started with one Abitibi Paper Retriever bin in 2005, which grew to three bins by the end of the school year. In 2007, CBMS was awarded a \$1000 grant to start a recycling program. They bought bins, Rubbermaid wheeled containers, and boxes for the main office, classrooms and hallways. Their program expanded greatly in 2008 after teacher and recycling champion, Mr. Cole, attended the OKRA Recycling Conference and decided they should broaden their program. Now they recycle paper, corrugated boxes, plastics, aluminum, ink cartridges and cell phones! Since Sand Springs doesn't have a curbside pro-

OKRA Recycling Conference (cont.)

gram, CBMS is one of the largest recycling locations in town. Mr. Cole also created a STEM-based elective class for 8th graders that uses Environmental Science as the core. Students recycle and use the Oklahoma Green Schools curriculum to learn the importance of sustainability. Students in that class are assigned rooms and then gather the recyclables from those rooms between class periods and dump them in the large bins outside. Mr. Cole stressed that Mr. Murph bins are essential for recycling all the different types of materials.

After the student presentations, Sara Ivey, Education Coordinator, ODEQ, stressed how difficult it is for schools to maintain recycling programs without help from industries, such as Paper Retriever (which is now out of business) and Mr. Murph.

During lunch, Michael Patton, Land Legacy, gave a lively presentation called *Getting Attention—the Kardashian Approach to Green Messages*. Michael stressed that the message is everything and in order to get attention, you have to do four things which he called the 4Get Me Notes (so don't forget them).

4Get Me Notes

1. **Get Attention**
2. **Get Emotional**
3. **Get Back on Message**
4. **Get it Shared**

Michael said that keys to success are to keep doing things, and to realize it takes time to reach your target audience so your message has to be consistent. He said that inspiration is everywhere, so just look around and be open to it. Have fun, and stay on message. Michael shared video and radio ads that he created for the Metropolitan Environmental Trust to encourage recycling. He also shared examples of cartoon ads that he had placed in local newspapers, such as "Thank You Very Mulch," and "Put the Can Back in American." He was creative and got (almost) free artwork for these ads by paying student artists in pizza for drawing the cartoons. Michael said that when advertising events, the most powerful word you can use is **Free**. So, if you have something you can give away, be sure and say so.

After lunch, Larry Karigan-Winter, past Director of Solid Waste and Recycling for Madison County, Arkansas, described the challenges of recycling for rural communities.

He detailed his actual experience in Madison County where recycling was implemented to minimize the dumping and burning of waste. Madison County started by buying land (at a very low price) for the construction of a drop-off recycling center/solid waste transfer station. They worked with an aluminum buyer initially, and after this began to make money, they moved on to other metals. They set up a waste exchange program which made \$300 its first year, but has increased so much that in 2014 it made \$40,000. They obtained donations of many items from residents, who wanted to support the program and Wal-Mart donated recycling containers. Madison County eventually created a hub and spoke system where the main recycling center/solid waste transfer system is located about 30 miles from a recycling drop-off site. The land for the spoke was donated by a local landowner. At the hub, residents can get rid of both their recyclables and their trash, while the spoke was conveniently located for folks who were farther away from the hub. There is fee for trash disposal, which provides about 70% of the revenue for the program, while most recyclables are accepted for free. The funds from the trash disposal make it possible to continue recycling.



Larry Karigan-Winter speaks on recycling in Madison Co., Ark.

Next Kate Worley, Senior Manager, Solid Waste and Recycling with Wal-Mart spoke on their path to zero waste with organics recycling. Kate said that in 2008, Wal-Mart committed to zero waste by 2025. But, they knew that organics was going to be a huge challenge. Organics constituted 35% of compactor waste, but there was a lack of infrastructure for organics recycling, and organics recycling was very costly. To begin their program, Wal-Mart partnered with Quest to launch organics recycling nationwide. In 2009, they launched in California and then moved eastward. Most Wal-Mart stores across the nation are now on the program. The organics program has priorities for use of the organics set from highest—source reduction, next feed people, then feed animals, and on down to the lowest priority—landfill the waste. Trucks go from store to store and collect the waste. The containers on the trucks have to be lockable, washable,

right-sized, and leak proof and the trucks must be leak proof also. Depending on the availability of local outlets for the organics, it is currently formulated into animal feed or used for commercial compost or anaerobic digestion. Kate said that Wal-Mart plans to continue their focus on the organics program with leadership support, training, and ongoing execution of the program.

Lynn Malley, OSU-Oklahoma Cooperative Extension, made announcements about the upcoming Oklahoma Compost Conference and Oklahoma Master Composter Training. Lynn said the purpose of the Master Composter training was to train volunteers in order to educate and enthuse the public about composting with a goal to help communities reduce waste going to landfill and develop a useable soil enrichment product. Lynn also spoke briefly on the mission of the OSU Extension office and some of their primary activities. These activities include partnering with ODEQ to put on Environmental Law Enforcement Training, hosting a Food Security Conference and being involved in SWANA (Solid Waste Association of North America).

The final session of the conference was an Expert Q&A Wrap-Up featuring a panel with Scott Cassel, Robert Pickens, Michael Patton, Larry Karigan-Winter, and Kate Worley. They answered questions from conference attendees on plastic and Styrofoam recycling, materials exchange programs and discussed the importance of keeping recycling local (or at least within the U.S.).



After the conference, there were two tours attendees could choose from. One was a tour of Natural Evolution, the only E-Stewards, ISO 14001 certified electronics recycling company in Oklahoma. Natural Evolution reallocates and demanufactures materials ranging from old PC's to large mainframes to obsolete science classroom equipment. Their mission is to provide efficient, effective recycling services while minimizing its carbon footprint and in a Zero landfill, Zero Prison Labor and Zero international dumping process. The other tour was of the Tulsa Recycle and Transfer Center, a state-of-the-art single

stream MRF (Material Recovery Center), and the first of its kind in Oklahoma. Better known as Mr. Murph, the MRF utilizes an automated system to separate recyclables using conveyor belts, magnets, optical sorters, screens and other mechanical devices. This technology has allowed Mr. Murph to increase from a 15% recovery rate through manual sorting to a whopping 95%!

To download the program agenda and presentations from the 2015 OKRA Recycling Conference, see www.recycleok.org/okra/oklahoma-events-activities.



Conference exhibitors from the ODEQ (above) educated attendees about Tire Recycling in Oklahoma

Jeanette Nance from Keep Oklahoma Beautiful (left) discusses Fresh Paint Days and the Great American Cleanup with conference attendee

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OKC Energy Recycled at all Home Games in 2015

For their inaugural season at the newly renovated Taft Stadium, OKC Energy Football Club (FC) offered recycling at every home game, thanks to a partnership with Republic Services, an industry leader in recycling and solid waste. For their first nine games, Energy soccer fans diverted about 3,100 pounds of recyclable materials including aluminum cans, plastic bottles and paper products from landfills by using the event boxes placed throughout the stadium.



As part of a partnership with Energy FC, Republic donated waste and recycling containers for the entire season and sponsored All-in-One recycling as well as waste removal for all home games. For Republic, the sponsorship represented an effort to increase awareness of and access to recycling throughout the Greater Oklahoma City area, with a goal of increasing participation long term.

“As a professional sports organization, we recognize the opportunity to be a positive force for change in the community,” said Energy FC co-owner Bob Funk Jr. “Our organization is rooted in a deep pride for where we live and play. It’s a pride felt by our players, coaches, management and fans. We knew that given the opportunity, Energy FC supporters would bring the same passion to environmental stewardship they bring to cheering on our team.”

Each Energy FC home game brings more than 4,000 soccer fans to Taft Stadium. Jeff Kintzle, area president of Republic Services, said that he believes that the Energy soccer fans could carry these types of sustainable behaviors forward into the community, influencing family members, coworkers and neighbors, and creating tremendous potential to increase recycling participation throughout Oklahoma City.”



RESOURCE RECYCLING CONFERENCE

Save the Date

Resource Recycling Conference 2016 is the must-attend national conference for the recycling industry's most influential policy leaders, CEOs and government officials. The conference, now entering its seventh year, is your opportunity to network with clients, prospective partners, vendors and top materials management decision-makers all in one location, saving your precious time and travel expenses.

The Resource Recycling Conference will offer an expertly curated series of presentations, education sessions, workshops and Q-and-As featuring the leading industry executives and associations. Don't miss this opportunity to learn the latest on materials processing trends, tactics to boost diversion rates, legislative talking points, market analysis and much more.

Mark your calendar!
August 30—September 1, 2016
New Orleans, LA

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To join or renew your membership in 2016:

- ♦ **Send completed membership brochure and check by mail to OKRA, PO Box 521154, Tulsa, OK 74152-1154.**
- ♦ **Go to www.recycleok.org/join-us.php and access the online membership form toward the bottom of the page. You can pay online via PayPal, by mail (send your check to the PO Box above), or by credit card (follow the PayPal link and select "Pay by Credit Card" instead of PayPal).**

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