

Volume 29 Issue 2

**June 2015** 

# SHAMA

# Pembroke Did It Again!

The Envirothon is a problem-solving, natural resource education program for high school students. In the field, reams of students are challenged to hone critical thinking skills, and work as a team. They answer written questions and conduct hands-on investigation of environmental issues in five categories—Soils/Land Use, Aquatic Ecology, Forestry, Wildlife, and Current Environmental Issues. In addition to a written test, the teams also present an oral presentation solving a specific natural resource issue.

The Envirothon stimulates, reinforces, and enhances students' interest in the environment and our state's natural resources. The concept was created by the Pennsylvania Association of Conservation Districts as an outdoor hands-on competition. From "Environmental Olympics," the concept expanded to other states; and when the national completion was added in 1988, the name changed to Envirothon. Envirothon affords a unique approach to teaching environmental education, and it's fun!

On March 26, 2015 the KC Region Envirothon was held at Burr Oak Woods in Blue Springs, Missouri. Seven schools made up the eight participating teams which include:

Blue Springs High School, Fort Osage High School, Lafayette County C-1 High School, Knob Noster High School, Oak Grove High School, Pembroke Hill, and Smithville High School

The top three teams qualified to attend the Missouri State Envirothon. Those students attending at the State level were: 1st Place; Pembroke Hill, 2nd place; Blue Springs High School, and 3rd place; Smithville High School.

These three teams traveled to the Capital West Christian Event Center in Jefferson City on May 1st to compete in the State Envirothon. Sixteen schools competed, with Pembroke Hill, taking the top score in the State for the 6th year in a row.

Teams participating in the State Envirothon represented the best and brightest of high school teens across Missouri.

The winning Pembroke Hill team members will represent Missouri at the 2015 North American Envirothon at Springfield, Missouri at the Missouri State University Campus, July 27-August 2, 2015. Pembroke team members are: Eric Koch, Domenic DiMare, Saurabh Goel, Francesco DiMare and Devon Dietrich. The advisors are SueAnn and Rick Wright. Wright remarked after the winners were announced, "We are very honored to represent Missouri at the national event this summer and look forward to the challenges that are ahead."



Pictured: Francesco DiMare, Domenico DiMare, Saurabh Goel, Devon Dietrich. Not pictured: Eric Koch, team captain.

DNR Photo by Van Beydler

# CONGRATULATIONS PEMBROKE

## **Jackson County SWCD Hires Summer Intern**

The Jackson County Soil and Water Conservation District office has hired an intern for the first time in over a decade. The internship program is funded through the Department of Natural Resources. The Jackson County office decided to host an intern because they wanted to help a student of the community learn about the related career field that they aspire toward. The intern chosen is Tiffani

Sims, a student at the University of Central Missouri working towards a bachelor of science in wildlife and natural resource conservation. She also minors in agriculture because she feels that "there is a huge opportunity for conservation to benefit both the producers in agriculture and the resources and wildlife affected by agricultural production." She hopes to learn a lot about the relationships that farmers can and have developed with the state and federal government to make improvements on their land.

She hopes that moving forward, agricultural producers will keep an open mind and consider the long term benefits over the short term costs of starting conservation practices on their land. She wants to help prove to farmers that they could actually end up being more profitable in the future and help their families sustainably carry on the family farming tradition by including conservation efforts on their farm. Despite not having grown up on a family farm, Tiffani realizes the importance of agriculture and its impact on the environment. She says she chose her career path because, "I see a lot of opportunity in agriculture to incorporate conservation practices that will benefit the farmer as well as the environment. I want to be a part of the solution to problems Midwest agriculture is experiencing with natural systems and with public perception." She says she hopes we see a day where nature and farming works in tandem to actually help each other.



Tiffani Sims

Some goals that Tiffani hopes to achieve as an intern here is to learn how to communicate with farmers about managing their land, get an introductory understanding of Geographic Information Systems computer programs that can be very useful in understanding the composition of a farm, and to network with farmers, conservationists and other members of the community. She expects to make a good fit within this office because it aligns very well with her interests and wants to help in any way she can. "I am so thankful for this opportunity because I know I will learn a lot and gain very useful experience for my future," said Tiffani about her summer internship. We hope to make it possible for her to achieve these goals so she can move on to be successful in her future career.



#### **FSA County Committee Elections**

The election of responsible agricultural producers to FSA county committees is important to ALL farmers and ranchers with large or small operations. It is crucial that every eligible producer take part in this election because county committees are a direct link between the farm community and the U.S. Department of Agriculture.

Committee members are a critical component of the day-to-day operations of FSA. They help deliver FSA farm programs at the local level. Farmers who serve on committees help decide the kind of programs their counties will offer. They work to make FSA agricultural programs serve the needs of local producers.

#### **Nominations Begin**

June 15, 2015— August 3, 2015

The nomination period begins. Request nomination forms from the local USDA Service Center or obtain online at http://www.fsa.usda.gov/elections.

This year, the Jackson County Local Administrative Area, that will be holding an election is #3. That area consists of an area in western Jackson County, west of 7 Highway and the Little Blue River, south of the Missouri River, and east of the county line.



#### 2015 Conservation Farmer of the Year

Ken Summers is Jackson County Soil and Water Conservation Districts' 2015 Conservation Farmer of the Year. John Campbell, Vice—Chair on the Jackson County Board of Supervisors presented Ken his award at Jackson County's Annual Meeting, February 19, 2015. Ken's award was in the form of a plaque that reads, "In recognition of outstanding achievement in the conservation of soil, water, and related natural resources,"

Ken and his Dad, Dan, have farmed together, as Ken puts it "for-ever", raising corn, soybeans and cattle. Ken has been saving his soil by using no till or minimum tillage and applying conservation practices which include miles and miles of tile.

Ken is of the same opinion as many farmers, "Farming can't be a job when you enjoy it so much". The only thing Ken enjoys more is his family, his wife Tricia and daughters Sydnee and Bailee. Family time is spent together at the girl's volleyball and soccer games. Sydnee also enjoys pulling at tractor pulls along with her Dad. The family worships at East Side Baptist Church in Independence.

# CONGRATULATIONS, KEN! KEEP ON FARMIN'!!



Pictured: Ken Summers, left, and Supervisor, John Campbell.

#### 2015 Conservation Educator of the Year

Sheri Hartley, is Jackson County Soil and Water Conservation District's Educator of the Year for 2015. Dave Fry, Info/Ed Specialist and Tech II, presented Sheri her award at Jackson County's Annual Meeting, February 19, 2015. Sheri's award was in the form of a certificate

and a check for fifty dollars.

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Pictured: Sheri Hartley and Dave Fry

Sheri has taught 30 years in the Independence School District. Twenty nine of those year have been at Blackburn Elementary while teaching 2nd, 3rd, & 4th graders. She is currently serving as an Instructional Coach this year providing professional development and support to classroom teachers.

Sheri received both her Bachelor's and Master's degree in Curriculum and Instruction from UMKC. She is also a National Board Certified Teacher.

Within the district, Sheri has served on curriculum writing teams-one of which has been the Science Design Team where teachers collaboratively wrote science inquiry lessons and also provided resources to help promote a hands-on approach to learning.

Sheri loves seeing students get excited about science. Whether it is working collaboratively with classmates on an inquiry or researching a topic, she understands the importance of learning from each other.

Her students have enjoyed participating in the annual Jackson County Soil & Water Conservation Poster Contest over the years as well as inviting Jackson County SWCD to come to schools within her district to teach them more about science.

Sheri shared how honored she is to receive this award and appreciates all the support that Jackson County SWCD provides to local schools and the community.



Ms. Hartley

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#### **Can Native Species Help Crop Yields?**

With increased pressure from the public on farmers to do more to protect the environment from potentially hazardous chemicals used on their crops, conservationists are trying to find solutions to satisfy both parties. Students and faculty at the University of Missouri in Columbia are researching ways to benefit both the wildlife that the public is concerned for and the farmer trying to profit from his or her land. Bradford Farms is used by the university to give students hands on learning about farm production methods and allows them a space



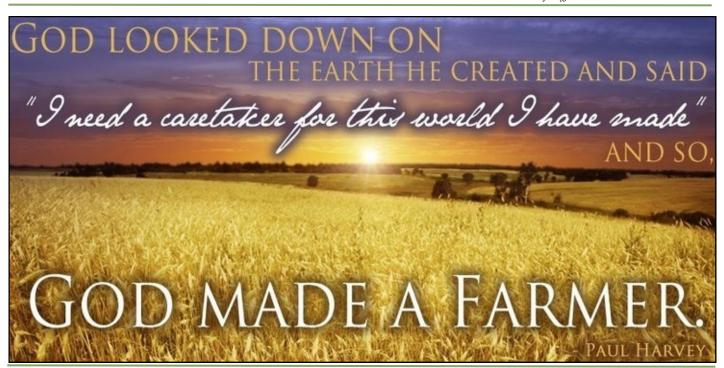
to do research projects. One particular research project occurring at Bradford farms recently is how using buffer strips with native species plantings can benefit wildlife, specifically pollinators, while improving soil and drainage that could increase yields.

These buffer zones are proposed to be installed in areas that are less productive or undesirable for row crops. These can be areas such as pond edges, steep hillsides, edge-rows or drainage ditches. Although the input costs for some native seeds are quite expensive at initial installation, costs can be offset by assistance programs like USDA's Crop Reserve Program. The research was inspired by the Missouri Department of Conservation and National Resources Conservation Services. Installing native plants in these areas has allowed for better soil control, including reduced erosion and less chemical runoff into waterways. Soil improvement benefits the farmer, while plant diversity benefits wildlife like bees and quail.

The trick to this conservation practice is figuring out the most efficient places to install buffer zones on each individual farm. Each farm should be managed carefully so that individuals know what methods and practices work best for them and for the environment. A good example of a small change that can improve the success of pollinators in row crop areas is simply spraying pesticides in the evening instead of in the morning. The reason for this is that the good pollinators are typically more active in the morning, so farmers are less likely to hurt "good bugs" just by spraying in the evening instead.

Bradford Farms continues to research this topic to figure out what native species will work best, what type of areas are most successful to be planted in native species and how to make this cost effective for farmers. Bradford Farms is active within the community and encourages people from anywhere to visit. The opportunities for learning and mediation between agriculture and conservation are limitless. The first step for each party is effective communication, which can be achieved through several outlets provided by the state, such as the Missouri Department of Conservation, Department of Natural Resources and Soil and Water Conservation Districts. These government offices can give farmers and urban dwellers alike information on improving land and environment for everyone, wildlife included.

By Tiffani Sims



#### **2014 Photo Contest Winners**



"Hungry"—Wildlife Category

\*\*By~ Karen Billinger



"Stubborn"—Education Category

\*\*By-\*\* Tammy Baxter\*\*



"Oaks of Fall"—
Trees & Plants Category
By- Tammy Baxter



"Rails of Autumn"—Landscape Category

\*\*By-\*\* Tammy Baxter\*\*



"Eagle"—Conservation Category

By— Ronald Billinger





"Wild Fluffy"—Wildlife Category

\*\*By- Mackengie Grist\*\*



"Locust Hatching"—Education Category

\*\*By- Morgan Davis\*\*



"Wind Power"—Conservation

By— Morgan Davis



"Long Way Down"—Landscape Category **Sy— Mackengie Grist** 



"Different Yet the Same" — Trees & Plants

By — Dulce Vargas Delgadillo



The winners of the 2014 Jackson County Conservation Photo Contest were honored Thursday, February 19, 2015 at the annual Ag Appreciation Night, in the form of a certificate and a cash prize of twenty-five dollars for each winning photo. Youth and Adults are encouraged to enter the contest. Greg Stegner, Jackson County NRCS Resource Conservationist, presented the awards. A special thank you to Carla Sands, educator at Oak Grove Middle School, for having her class participate. If you would like to participate in the Jackson County 2015 Photo Contest and win \$25 per winning photo, contact Linda at 816-228-1836 x 101 or email: linda.struewe@swcd.mo.gov

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#### 17-Year Cicadas Will Raise A Racket



For 17 years, a particular brood of cicada nymphs tunnels through the soil, sucked sap from roots, and grew from ant-like specks into bumblebee-sized nymphs. They will emerge by the thousands this spring in western Missouri and transform into winged adult insets, with male cicadas raising a raspy racket as they serenade females.

Periodical cicadas pose no threat to people and minimal threats to trees. But early summer will be abuzz with sound where 17-year cicadas emerge, said Rob Lawrence, forest entomologist for the Missouri Department of Conservation.

"In some places they make a pretty loud noise," Lawrence said.

The cicadas will begin emerging from the soil in early to mid-May, depending on how quickly weather conditions warm soil temperature. Current conditions could prompt the

emergence to begin May 10 to May 12 in the Kansas City and St. Joseph areas, he said, though warm temperatures could hasten emergence.

Cicada nymphs will open half-inch holes in the soil surface as they emerge. Some may build three—to five-inch tall mud chimneys about their holes. Wingless nymphs will climb up on trees and other objects, shed their exoskeletons, and become adults with wings. That leaves brownish paper shells that resemble shed skins attached to trees, porches and posts.

Adults will climb or fly into trees. Males will join together to form choruses to attract females. Or consider it a jam session with instruments. Male cicadas rapidly flex two drum-like structures in their abdomens called tymbals. The flexing produces a click, and the clicks come so fast it produces a raspy hum. They sing during the day with the loudest drone rising during the hottest part of the day.

Annual cicadas appear each year and their drone ebbs and flows in the tree tops. But annual cicadas appear later in the summer than the periodical variety, Lawrence said. Periodical cicadas will be prevalent in late May and June, annual cicadas appear in July and August.

Periodical cicadas are so named because the broods emerge in 13-year or 17-year cycles. This 17-year brood emergence is occurring in an area that extends from Iowa to Texas and includes western Missouri and eastern Kansas. A 13-year emergence is also occurring is southwest Missouri and portions of other states. But the two broods are not expected to overlap.

Striking red eyes and blackish bodies distinguish periodical cicadas. Annual cicadas have greenish bodies, dark eyes and are about two inches long. Periodical cicadas are slightly smaller. Both types of cicadas include various species.

Periodical cicadas will not appear in all locations within the brood emergence area, Lawrence said. A field or yard that did not have trees 17 years ago, or perhaps even 34 years ago, would not have provided a place for females to lay eggs and for the nymphs to hatch and drop to the soil. Also, soil condition changes such as severe drought or construction disturbance could reduce the number of nymphs.

However, in some areas with favorable conditions, periodical cicadas could appear by the hundreds or even thousands. Such large, periodic emergences provides a feast for creatures that feed on insects. Wild turkeys will eat nymphs, so will fish where cicadas drop into the water.

Back in 1998, when the parents of this 17-year cicada brood were mating, an adjacent 13-year brood also emerged. But that overlap only occurs once every 221 year, Lawrence said.

This emergence will not be as large but will still be noisy. Adults emerging from the nymph shells will be soft at first. But within hours their wings and exoskeleton will dry and harden. They will then begin making the next generation that will sing in 2032. Article from MDC.

## Fiscal Year 2016 Begins July 1, 2015

July 1st is the start of Fiscal Year 2016! Which means we are making plans for FY 2016 cost share. If you would like to keep your soil on your acreage, and your land is assessed as Ag, and you have some kind of production on your land, you might be eligible to receive cost- share funds.

Cost share is an incentive program made available, through your tax dollars. One-tenth of one percent of your tax dollars is divided between Parks/Rec and Soils, which is administered through the State by The Department of Natural Resources.

If you are interested in saving your soil, the first step is getting your name on the cost share list and then filling out the preliminary paperwork. Your cost share contract must be made with the owner of the said property. The cost share program exist because of Missouri voters. This measure will be on the ballot again in

2016 for renewal. It is your prerogative to vote to keep our Natural Resource of SOIL in Missouri.

If you have questions or would like to be on the cost-share list, call Linda at: 816-228-1836 x 101 or email: linda.struewe@swcd.mo.gov

## NRCS Celebrating 80 Year of Helping People Helping the Land

NRCS News Release

Eighty years ago the United States suffered from suffocation dust storms caused by drought and inadequate measures to protect the land. The natural disaster led to the creation of the Natural Resources Conservation Service (NRCS), a USDA agency that helps people help the land by providing financial assistance and free technical assistance to land users.

The worst of the storms occurred on April 14, 1935, when an ominous wall of blowing sand and dust swept across the Great Plains. This day is known as Black Sunday. During that massive storm, people were forced to crawl on their hands and knees in search of shelter, literally unable to see their hands in front of their faces. Cars stalled and stopped in the choking dust. Many thought the end of the world had come.

In response to Black Sunday, and the damage caused by dust storms, Congress passed the law on April 27, 1935, that created NRCS.



"Since that time, our commitment to soil science and soil health has helped farmers and ranchers put in place conservation practices that protect and improve natural resources," Missouri State Conservationist J.R. Flores said. "Healthy soils are the foundation of agriculture. In the face of mounting challenges such as a growing global population, climate change and extreme weather events, soul health is critical to our future."

NRCS serves all 114 Missouri counties. Across the Show-Me State, nearly 400 NRCS employees work out of more than 100 offices with another 400 employees of local soil and water conservation districts and state agencies also working out of Missouri NRCS offices.

To get more information about NRCS and its programs, visit a local NRCS office or the Missouri NRCS website at http://www.mo.nrcs.usda.gov. There is a link on the site to assist in locating local offices. Local offices also are listed in telephone directories under "U.S. Government Department of Agriculture."

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## Winners of the 2015 Poster Contest

Trophies were recently awarded to county winners in the District's Conservation Poster Contest. The theme for 2015 was, "Local Heroes: Your Hard Working Pollinators". Poster contest supplies were provided for 708 third and fourth grade students from seven Jackson County elementary schools. The contest provides students an opportunity to artistically express what they have learned in the classroom about soil, water, and related natural resource conservation.

County poster contest winners receive trophies for their winning entries and a poster party, which consist of juice and trail mix, for the entire class, celebrating with their peers in their own classrooms and of course, lots of pictures.

Thank you to all who participated, it's a great learning tool, as well as a way to encourage students. The district provides each student with a ribbon. Blue, red, and white rosette ribbons for the winners in each classroom and green participant ribbons for everyone else, because each student is a winner.



Carter Bohanon 1st Place 4th Grade Prairie Branch Elementary Grain Valley



Jaden Carey 1st Place 3rd Grade Underwood Elementary Lee's Summit



Morrigna Scheur 2nd Place Overall Christian Ott Elementary Independence



Erynn Boatright 3rd Place Overall Blackburn Elementary Independence

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#### **Conservation Courier Newsletter**

# JACKSON COUNTY SOIL AND WATER CONSERVATION DISTRICT

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The Conservation Courier Newsletter carries the message of natural resource conservation to rural and urban Jackson County. To receive a quarterly e-mail notice listing new topics, just e-mail <a href="mailto:linda.struewe@swcd.mo.gov">linda.struewe@swcd.mo.gov</a> with your request.



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If you would no longer like to receive this publication please contact the office.

Kob Montgomery, Chairman John Campbell, Vice Chairman Dan Stock, Treasurer Lala Kumar, Secretary and University of Missouri Extension Tim Brockmeyer, Member

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