

*Mission: to unite as citizens and actively engage in the preservation of the Spring Creek Watershed*

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**Spring Creek Coalition**  
**2434 East 56 Place**  
**Tulsa, Oklahoma 74105**

## Spring Creek Watershed Landowners Fall 2017 Newsletter



Est. 1994

THE MOST PRISTINE  
LARGE OZARK STREAM  
IN OKLAHOMA  
MANAGED AND  
PROTECTED BY  
PRIVATE  
LANDOWNERS

**Phone: (918) 906-6762**  
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### GIVE BACK TO YOUR CREEK FALL CLEAN-UP COOPER'S BRIDGE /KING'S CURVE

**Saturday, November 4, 10am – 12pm**  
**Rain or shine**  
**Gloves and trash bags provided**  
**Hot lunch for all participants**  
**Contact: Beth Rooney, 918-906-6762**

We made such a significant impact at Cooper's Bridge last year, working with Cedar Crest, that we'd like to do it again. We'll also send a group upstream to King's Curve. Bring a canoe for stream-side clean-up. Look for an email reminder in late October. [Directions here](#) (or call 918-906-6762).

### Significant Women in Agriculture: Emily Oakley

*The following is a condensed version of an Oklahoma Department of Agriculture, Food and Forestry, March 2017 press release. Emily and her husband Mike Appel are former SCC board members and make their living growing organic vegetables at Spring Creek. See Outing article, right.*

Emily Oakley, a city girl from Tulsa, never planted a seed before her high school and college courses grew her awareness of global environmental issues and their connection with agriculture. Attending Oklahoma State University's Science Academy opened her eyes and gave her a desire to work with small scale farmers to build sustainability.

That desire blossomed into a drive to become a small scale farmer herself in spite of opportunities to stay in graduate school at the University of California Davis where she

received her master's degree in International Agricultural Development.

She returned to Oklahoma and eventually bought land east of Tulsa in Cherokee County where she and her husband, Michael Appel, grow more than 25 different types of vegetables on 3 acres including a hoop house full of tomatoes.

One of the many impressive facets of Oakley's life is her amazingly unselfish



Emily & Mike at Cherry Street Market

### FALL OUTING SPECIAL: THREE SPRINGS ORGANIC FARM

**Saturday, October 21, 10am – 12pm**

This is a unique opportunity to see Three Springs Farm on Spring Creek near Oaks.

Owners Mike Appel and Emily Oakley will give us a tour of their farm and provide insights into what it takes to earn a living through organic farming. We will end with a bring-your-own picnic lunch at the farm.

Directions: From Rocky Ford park, head east on highway 82A for 2.3 miles. Look for the driveway on the left just after a curve in the road. There is an open green gate; the house is yellow with a red roof.

## Spring Creek Farmer Emily Oakley

attitude when it comes to sharing her love for agriculture with her neighbors – and Oakley’s neighbors span the world.

Take for example, her involvement in the Farmer-to-Farmer Program. This program promotes economic growth, food security and agricultural development worldwide. Volunteers help developing countries improve productivity, access new markets, and conserve natural resources. Oakley has served as a Farmer to Farmer Consultant to Guatemala, Nicaragua, the Dominican Republic, Haiti, Ghana and Nigeria.

“We actually still do the Farmer to Farmer exchanges through USAID (United States Agency for International Development) in our off-season,” Oakley said. “Every other year we tend to do them, and we actually took our daughter to Guatemala. We still try to maintain that connection with Farmer to Farmer because it is a big part of what brought us to farming in the first place.”

So, just inside the Cherokee County line, Oakley pulls on her work clothes each day and heads to the field. The sun’s first rays catch the brim of her floppy brown hat as her hands swiftly harvest organic vegetables for the Cherry Street Farmers Market in Tulsa.

Oakley’s service on the Cherry Street board led to the market’s move from a small parking lot to filling two blocks of Cherry Street and expanding the market to over 70 vendors. She was also a founding board member and co-president of Global Gardens, a Tulsa organization that facili-

## Intern Katie Easter

tates school gardening in low income areas. Oakley also worked to incorporate SNAP benefits into the Cherry Street market to provide extra nutrition to those in need and is very pleased that many other markets in Oklahoma now offer this benefit.

“Agriculture hasn’t just provided a livelihood for Emily, but is Emily’s life work and passion,” her husband said. “Through her farming, Emily wants to show that women play a key role in farming and that farming can have a positive impact on the environment.”

### Katie Easter: The Snails of Spring Creek

*Katie Easter is an NSU Biology student and an SCC board member. Katie came to SCC last spring as an intern. She needed 20 hours of volunteer work with a non-profit for her Cherokee Nation scholarship, and she chose us. Katie took snail counts at two locations in Spring Creek to provide data that we did not have. She will continue her sampling and analysis this fall. This is her report.*

Snails are soft-bodied animals that carry with them a protective shell composed primarily of calcium and other minerals in the snail’s diet. The soft-bodied animal is permanently connected to the shell by a strong ligament and other soft tissues.

Most snail species eat small bits of algae and organic debris found on the bottom and sides of the river channel. Through sheer numbers, they contribute greatly to the nutrient exchange in river ecosystems, playing a dominant role in the ecology of freshwaters by providing food for many other animals and by grazing on vast

## The Snails at Spring Creek

amounts of algae and debris. Primarily by controlling algae growth, they also maintain water quality for other bottom-dwelling animals such



Katie Easter conducts snail counts at Spring Creek.

as freshwater insects. They are critical to normal ecology of rivers and are additionally useful as indicators of water quality.

A few robust snail species can easily survive in polluted habitats, so if more of these are found than the less hardy snails, it could be an indication of declining water quality. Gilled snails, for example, are reliant on high concentrations of dissolved oxygen and tend to be more sensitive to pollution than lung snails. Prominent impacts that may be attributed to decline and lack of diversity in gastropods (snails and slugs) include dams, channelization and dredging, sedimentation, and water pollution.

Some landowners in the Spring Creek watershed have noticed aquatic snail densities declining over the years. However, SCC isn’t in the position to say if snail numbers are increasing or decreasing because there is no baseline information on snail densities in the creek. The gas-

## School Outreach

tropod surveys that are currently being conducted and analyzed on Spring Creek aim to provide this valuable information.

### School Outreach

Just down the road from local elementary schools Peggs, Lowrey, and Oaks-Mission is an incredible resource for hands-on learning: Spring Creek. Why not get kids involved, up close and personal, in this amazing outdoor science lab?

In conjunction with the Oklahoma Conservation Commission Blue Thumb program, Spring Creek Coalition hopes to do just that.

Carolyn Robbins, Peggs Elementary School Science teacher (and principal), is working with us to schedule a field trip to the creek in September for her 7<sup>th</sup> and 8<sup>th</sup> graders. She would like the kids to be able to get in the creek for seining and sampling to learn about species indicative of water quality.

We would like this to become an annual event with Peggs and eventually also with Lowrey and Oaks Mission.

Looking for a way to contribute to SCC? We need a **School Liaison**, someone who can work with the watershed schools each year to see how SCC can help them. If you are interested or have questions, please contact Beth Rooney, 918-906-6762.