

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

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Spring Creek Coalition
P.O. Box 217
Peggs, Oklahoma 74452

Spring Creek Watershed Landowners

Fall 2010 Newsletter



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

Phone: (918) 637-1449

Email info@springcreekok.org

GIVE BACK TO YOUR CREEK— FALL CLEAN-UP EVENT!

Saturday, November 6th
10:00 a.m.—2:00 p.m.
Twin Bridges Area

- Weiner roast for the kids
- Rain or shine
- Gloves and trash bags provided
- Contact Jennifer Owen at 918-637-1449 for information

Directions:

From Tulsa: Take Highway 412 east. Get on the Cherokee Turnpike. Exit at Locust Grove (toll \$25). Go South (right) on Hwy. 82, and travel 3.0 miles to Ear Bob Road, the first road on your right after crossing Spring Creek.

From Tahlequah: Take Hwy. 82 north to Ear Bob Road, the last road on your left before crossing Spring Creek.

Both: Turn west on Ear Bob Road (at Rowland Ranch Country Store/Cowboy Steakhouse). Go 1.7 miles to DO61.6 road (at the Ballou Baptist sign). Turn right; stay on the black-top road for 0.5 miles until you reach the bridge (this is Twin Bridges).

The clean-up will be at the bridge area.

Who Let the Hogs Out?

By Neal Russell

Within the last several years it seems hogs have invaded the watershed in great numbers. The truth is, hogs have been around northeast Oklahoma for a long time. Domestic hogs were once raised on open range and collected twice a year for harvest and sale, but since then they have become wild and roam the countryside without borders. These hogs are not native to North America like their cousin, the javelina or collared peccary in the southwest. Rather they were introduced by early explorers such as Hernán Cortes and Hernando de Soto. In the 1930s a new species of hog, the Russian wild boar or Razorback, was imported for sport hunting in Missouri and Arkansas. Now in northeast Oklahoma we have a mix of both domesticated, Russian, and cross-bred swine.

Feral hogs can carry and transmit several diseases and parasites to both humans and livestock. They also destroy crops and can negatively impact native species, such as deer and turkey, through predation and competition for food and habitat. Hogs are omnivorous which means they will eat both plants and animal matter. They also impose a significant threat to humans with their four continually growing tusks that can be razor sharp and may reach five inches in length. These hogs have a home range from one-half to 19 square miles, depending on food resources and habitat.



Furthermore, feral hogs are invasive to Spring Creek.

Who Let the Hogs Out

two litters a year consisting of four to ten young per litter and breed as young as eight months old.

Hog populations can be controlled by fencing, trapping, and hunting. There is no shortage of hunters who desire to hunt feral hogs and may even be willing to pay for it. Hunting feral pig is allowed year round and special "spotlighting" or night hunting may be permitted by application from the Oklahoma Department of Wildlife Conservation. One simple trap consists of two 16-foot long panels with 4" x 4" mesh and eight T-posts. Set one panel in a tight 10-foot diameter semi-circle formation and the other panel in a wide semi-circle with the ends overlapping the first. Fasten the panels to the T-post except where the bottoms of the two ends of the tight panel meet the wide panel. This allows the hog to push the bottom of the tight panel and enter the trap as it circles around trying to reach the bait. The trap can be baited with corn or sour grain that is slightly buried to prevent birds from getting it first. Please note that trapped pigs are dangerous and should be handled by an experienced individual.



More information on feral hogs and trap designs can be found at the Noble Foundation of Oklahoma at 580-223-5810 or online at www.noble.org.

The circular trap design.

A Stream's Struggle to Balance

A Stream's Struggle to Balance

By Jennifer Owen

Spring Creek is a channel for water and sediment flowing within its banks. It is constantly working towards a natural balance with its primary components: water, sediment, energy, and vegetation. This balance is called a **dynamic equilibrium** because the primary components are constantly changing. In turn, these changes



affect stream habitats and aquatic and terrestrial life.

A stream reach is said to be in a dynamic equilibrium when the **sediment load** leaving the reach is equal to the load entering the reach.

Unpaved roads account for 25% or more of sediment load.

Sediment load is the

amount and size of rocks and soil particles that are eroded and then transported by the flow. **Excessive sedimentation** is the result of more sediment load than the stream's energy can effectively transport.

Excessive sedimentation is damaging Spring Creek. The center channel of the creek continues to fill in and become shallower. As the creek becomes shallower it grows wider. As it grows wider the resistance of the bank and (shallow) bed slows the water velocity due to

Governor's Water Conference

friction. Thus the cycle of slower, wider, and shallower water *perpetuates*.

The primary sources of sediment into Spring Creek are eroding stream banks and unpaved roads. Unpaved roads account for approximately 25% or more of the sediment load. Reasons for a stream reach to be out of balance usually cannot be confirmed just by looking at the problem area. Changes in the primary components that occurred many years ago or far away are often the causes of the instability.

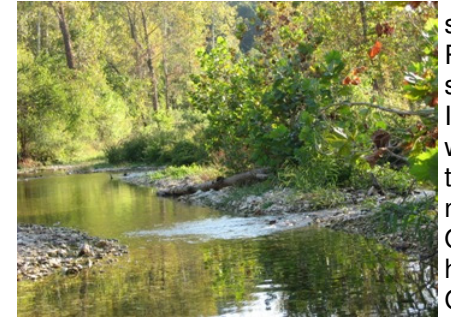
During the last 170 years, land use changes have caused widespread delivery of substantial amounts of gravel-sized sediment into Spring Creek. Excess gravel bed load is moving in wave-like forms. Gravel-bar areas are increasing in mass and frequency. Deforestation and destruction of riparian vegetation extend the drainage network, thus accelerating release of gravel from storage throughout the watershed.

Streams do not "want" to go straight! The **sinuosity** (meander pattern) is a process of energy dissipation. It is one way the stream strives to maintain a constant slope. Channel slope and shape affect, among many things, how much energy is available to transport sediment. Another very basic factor affecting available energy is the volume of water. Extraction of large amounts of water by municipal or commercial ventures has a potential to significantly change Spring Creek's historical equilibrium.

Governor's Water Conference

On October 26-27, the Oklahoma Water Resources Board and the Oklahoma Water Re-

Fall Creek Clean-up



Beautiful Spring Creek— it's worth protecting.

sources Research Institute will host the Annual Oklahoma Governor's Water Conference

and Water Research Symposium in Norman at the Embassy Suites Hotel and Conference Center.

Both days will begin with a general session featuring local, state, and federal officials. Subsequent breakout sessions will include the Research Symposium and panels exploring impacts of the ongoing Oklahoma Comprehensive Water Plan on six distinct areas of interest: public supply, agriculture, environment, commerce/industry, energy, and tribal issues. More information can be found at www.owrb.ok.gov or by calling (405) 530-8800.

SAVE THE DATE!
ANNUAL MEETING

January 15, 2011

Location & Time TBA