

Protect Riparian Areas!

One of the most important things Blue Thumb does is to educate the public on keeping our streams healthy through riparian areas. A healthy riparian area helps reduce erosion, provides essential aquatic and terrestrial habitat, filters pollution, provides travel corridors for local wildlife and provides flood protection.

A healthy riparian area looks like the top picture below. You see vegetation, trees and grasses that stabilize banks and provide shade, woody debris that provides a home to fish and aquatic insects and a good connection to the flood plain. All of these elements work together to provide a healthy ecosystem which protects your drinking water.

In the bottom photo you can see that most of the vegetation has been removed from the bank, reducing the amount of shade. The lack of a stabilizing root system has also caused excessive erosion and widening of the stream.

We hope you will use the tools outlined in this catalog to educate citizens about the importance of protecting our streams!



Oklahoma Blue Thumb Education Program Services Catalog



*Promoting Stream Protection
through Education*

Stream Protection through Education

Oklahoma Conservation Commission ~ Water Quality Division ~ Blue Thumb

What is the Blue Thumb Program?

The Blue Thumb Water Quality Education Program is a part of the Oklahoma Conservation Commission's Water Quality Division. Blue Thumb's mission is "stream protection through education." We work with citizen scientist volunteers to collect stream data, and offer information to the public about water quality and stream protection.

What do Blue Thumb volunteers do?

Most of our volunteers are involved in stream monitoring. They learn to perform water chemistry tests on a stream of their choice. The volunteers also work with Blue Thumb staff in the stream to collect aquatic insects and fish, and complete other field work.

Many of our volunteers spend time on education activities, like speaking to civic groups or setting up exhibits that help people understand how to reduce water pollution.

How can I get involved in Blue Thumb?

Typically, volunteers come aboard by participating in a training that introduces the Blue Thumb Program, stream ecology, and water quality monitoring. You can contact a Blue Thumb staff member to learn when there will be a training near you. Additional opportunities include simply working with a Blue Thumb staff member or attending a monitoring event in your area to gain knowledge about what we do and gain a better understanding of water pollution impacts. Contact us to begin your Blue Thumb experience!

What is the purpose of the catalog?

This small catalog offers a glimpse of how Blue Thumb volunteers and staff members protect Oklahoma's streams and rivers. By using a variety of educational tools and events, we find a way to meet local water quality education needs.

Whether you are interested in becoming a volunteer, or you are simply looking for a great creek adventure for a class or community group, let the Blue Thumb services catalog introduce you to the Blue Thumb world of water quality education!

Bring Blue Thumb Events and Tools to Your Area!

Talk to your local Conservation District ~ Blue Thumb works closely with Oklahoma's conservation districts. Let your district know you have an interest in local water quality.

Make contact with a Blue Thumb staff member ~ Consider a group to which you belong – would they enjoy a creek walk? Is there an event in your community where we might provide an educational booth or activity? Our travel takes us all over the state.

Cost for events ~ Blue Thumb offers most events free of charge. When there are expenses, such as to cover the cost of training materials, a small fee might be charged. This can be discussed during planning of activities.

For more information visit our website at

<http://bluethumbok.com>



Facebook/bluethumbok

Instagram - @bluethumbok



Exhibits and Handouts

Blue Thumb frequently makes exhibit materials available to volunteers who are working with us to spread the stream protection message. A variety of scenic panels work as a background. Display boards talk about the Blue Thumb Program. Handouts are available as well, and we often work with people to tailor a handout for their specific audience.

Living in Town Protecting streams and rivers

Living in an urban area has many benefits. Generally you are close to work, school, shopping and a variety of recreational opportunities. One of these recreational opportunities might be spending time in a park enjoying the outdoors. Maybe that park has a stream crossing through it and you remember playing in that creek as a child. The question now is, would you let your child play in that same stream?

The same urban areas that provide access to the streams that you think about, however, there are lots of things that can be done to improve our urban streams. For example, the stream shown here is being made and so the stream on the left is clear as as urban park. But to make any real headway we need to be making a concerted effort to help our streams. Let's look at how you can help your community improve its water quality and make your park that much more enjoyable.

www.bluthumb.org
www.facebook.com/BlueThumbOK



While the Oklahoma Blue Thumb Water Quality Education Program is a part of state government, more funds are needed to maintain a solid corps of volunteers who can help spread the word about stream and river protection.

Friends of Blue Thumb was formed as a non-profit organization with the mission to promote clean and healthy water ecosystems in Oklahoma, with an emphasis on fishable and wadeable streams and rivers, through education, stewardship and public outreach.

By partnering with the Blue Thumb program, the Friends supports volunteer efforts primarily through offering additional funds which go towards a variety of volunteer-led projects and programs.

For more information about the Friends of Blue Thumb, email friendsofbluethumb@gmail.com.

Blue Thumb Staff and Contacts



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Creek Walk

- ◆ A creek walk is really a stream ecology experience
- ◆ Learn what lives in a nearby creek by seining and looking under rocks
- ◆ Healthy streams have a lively community of fish and insects and everyone should jump in and learn about stream life
- ◆ A creek walk lays the foundation for the development of an environmental ethic
- ◆ Blue Thumb staff will help your group or class learn what lives in our waters and why it's important



WaterWise Gardening Workshop

Take your yard from a short green monoculture to a lively native plant sanctuary! Invite birds and butterflies to your home, and cleanse stormwater before it leaves your property. A WaterWise Workshop will cover:

- ◆ Why native plants are best
- ◆ Where water pollution comes from
- ◆ Landscape features that reduce runoff and filter water



Stream Trailer

The stream trailer uses water and plastic “sand” to demonstrate the difference between a healthy riparian area and an unhealthy riparian area, and the amount of erosion that happens with each. It can also be used to show how streams want to naturally meander and how water moves faster in a channelized stream versus a naturally meandering stream.

- ◆ Help students and city officials better understand the importance of leaving vegetation along a stream
- ◆ Watch what happens when you channelize a stream
- ◆ Contact Blue Thumb for more info



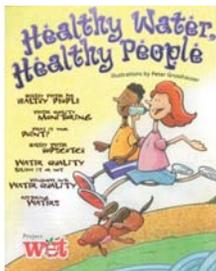
Fish Printing

- ◆ Based on ancient Japanese art called Gyotaku
- ◆ Provides an easy-to-make item that can be taken home
- ◆ Includes water quality information on the back of the paper
- ◆ Several types of rubber fish available with a variety of colors
- ◆ Available for checkout



Project WET

- ◆ Teaches the value of water through fun, interactive lessons
- ◆ Provides classroom-ready teaching aids
- ◆ Has activities for art, social studies, math or geography



For more information about
Project WET contact

Candice Miller
701-659-0008

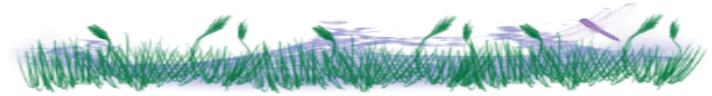
candice.miller@conservation.ok.gov



Quality Urban Streams Seminar

This six-hour seminar targets neighborhood associations, municipal and county staff members, as well as city counselors and county commissioners. This seminar promotes:

- ◆ Better understanding of the relationship that exists between land and water
- ◆ Low Impact Development strategies that improve landscapes and waterways
- ◆ Saving money through better land care practices
- ◆ Better understanding of EPA stormwater regulations



Tabletop Rainfall Simulator

- ◆ Uses six different surfaces to demonstrate rain runoff and infiltration
- ◆ Effectively demonstrates how pollution is transported from land to water
- ◆ Effectively shows how aquifers are recharged in healthy soils and from pervious surfaces
- ◆ Helps provide a realistic visual of real world situations
- ◆ Good for use in both urban and rural areas



Groundwater Screening and Groundwater Model

While about 75% of Oklahomans drink surface water, an important minority drink groundwater. These people are often curious to know what is in their water, so the Blue Thumb Program offers Groundwater Screenings. While bacteria is not included, several parameters, including nitrates, are tested for. Conservation districts typically sponsor these events, with local volunteers actually performing the tests.

Often at a groundwater screening, a groundwater model is used to educate volunteers and the public about this mysterious water beneath the surface of the earth.

- Shows how groundwater moves through the earth
- Helps people understand that pollution isn't limited to surface water
- Shows the interaction between ground and surface water
- Can be used in conjunction with a groundwater screening



EnviroScape

- Helps people understand they live in a watershed
- Shows how both urban and rural areas affect water quality
- Uses harmless food coloring to show how pollutants travel into streams and lakes
- Easy to use
- Available for check-out



Storm Sewer in a Suitcase

- Used to educate urban citizens about nonpoint source pollution (NPS)
- Neighborhood lawns hold pollution until it "rains"
- A good tool to help begin the dialogue on how NPS pollution can be reduced
- Actually see the subsurface drainage system
- Available for check-out



Blue Thumb Training for Outreach and Education

- ◆ Spread the word about keeping water clean! A Blue Thumb introduction to several of our special education models and tools is available.
- ◆ Learn the “buzz words” that help people stop and listen
- ◆ Find out how to check out, set up, clean up, and return Blue Thumb models
- ◆ Listen to an expert provide a demonstration
- ◆ Try your hand at water quality education



Creek Cleanup

- ◆ Local volunteers remove litter and junk from streams
- ◆ Participants learn about nonpoint source pollution
- ◆ Motivates participants to educate others about problems caused by trash in streams
- ◆ Know of a stream that needs cleaning? Call Blue Thumb for help in planning your event!



Blue Thumb Training Session for New Volunteers

The most important aspect of the Blue Thumb Program is our volunteers. Without them, no data would exist for many of our Oklahoma streams. Volunteers begin with training.

- ◆ Held in various cities and towns across the state
- ◆ Full-day introduction to Blue Thumb and education
- ◆ Learn about watersheds, nonpoint source pollution and life in the water
- ◆ Prepares volunteers to educate in their community
- ◆ Volunteers interested in monitoring attend a second full-day training focused on water quality and chemical tests



Blue Thumb Mini-Academies

- ◆ Designed to help teachers train their students
- ◆ Tailored to individual teacher needs
- ◆ One (or less) day training to prepare students for monitoring
- ◆ Allows students to perform real science
- ◆ Can be conducted at the beginning of each year or semester

