Introduction

Missouri Stream Team

- Introduction to Volunteer Water Quality Monitoring Training Notebook -

All Missourians rely on streams in one way or another and many of our streams could use a little help. They need people who love clean water, good fishing, and healthy habitat to take care of them year after year. That is why the Missouri Department of Conservation, the Department of Natural Resources and the Conservation Federation of Missouri partnered to develop the Stream Team Program.

Missouri is a national leader in volunteer stream stewardship efforts thanks to the creativity and determination of our members and strong agency support. While cleanups are a popular activity with volunteers, the Stream Team Program is about much more than just removing trash from streams. Promoting citizen awareness and involvement, Stream Team is a fun, hands-on program for people who want to learn about, care for, and protect local waterways. There is something for everyone!

It all started in 1988 when a few forward-thinking anglers, fed up with unsightly trash disrupting their fishing in Roubidoux Creek, banded together to clean up the mess. Around that time, leaders in stream management envisioned a program that would involve citizens in river conservation. In 1989, inspired by ideas shared at the first Rivers and Streams Conference, the Missouri Stream Team Program was born. The Roubidoux Fly Fishers (Stream Team 1) began as a group of local anglers holding small cleanups on their favorite fishing stream.

Since 1989, Stream Teams have been an impassioned voice for the protection of streams that Missourians rely on for clean drinking water, quality fishing, and first-class recreational opportunities. The Stream Team Program now boasts several thousand active Teams, with citizens participating in a variety of stream conservation activities.

The three goals of the Stream Team Program are education, stewardship, and advocacy. Each Team puts a personal touch on achieving these goals through efforts in their own communities. The Program provides supplies and technical assistance, and Stream Teams provide the rest. All that is needed to join is a sincere interest in conservation and willingness to contribute time for the betterment of Missouri's streams. Volunteers of all ages and abilities come to the Program from many backgrounds with one thing in common – a love of Missouri streams!

Education

As the volunteer movement to protect our streams picked up momentum, volunteers wanted to know more about the condition of their adopted waterways. In 1993, the Department of Natural Resources (DNR) became a Program sponsor to kick off the Volunteer Water Quality

Monitoring (VWQM) portion of the Program, enabling citizens to collect data that would provide critical information about stream conditions across the state. That first year, over 200 volunteers were trained to collect biological, chemical, and physical monitoring data on their adopted streams.

The VWQM portion of the Program continues to be one of the most popular Stream Team activities. Water quality monitors are provided equipment to collect data that are used in a variety of ways by municipalities, agencies, and other organizations. Data collection ranges from backyard creek monitoring for educational purposes to long-term projects to support watershed management plans.

Stream Team volunteers are always hungry for a deeper understanding of stream resources that can empower them to speak up for waterways and educate others. Stream Team staff are always looking for ways to provide more technical information to Teams in a manner that is fun and hands-on. As a result, in 1997 the Stream Team Academy was established as "a university without walls" for Stream Team volunteers wanting to learn more about stream ecology and issues. The first Academy workshop was Understanding Streams, a two-day watershed management course that includes an educational float on a nearby stream. Since then, workshops have been added on many topics including crayfish, mussels, aquatic insects, scientific drawing, invasive species, and many others.

A multitude of educators have implemented Stream Team in their classrooms, making the connections between the outside world and the varied use of science, math and social topics. It also instills community awareness, self-reflection, and personal leadership in students.

Stewardship

Teams are resource stewards conducting many activities that directly benefit streams. Activities like monitoring water quality, planting streamside trees, removing invasive species, and stenciling storm drains provide lasting positive impacts on the streams. Litter pickups, however, are the most popular activity due to the instant gratification of a job well done and the fact that anyone can participate. And, it's fun! There is something profoundly satisfying about sore muscles, dirty clothes, and piles of trash waiting to be hauled away, not to mention the camaraderie of a good barbecue and stories shared after a hard day's work.

Advocacy

Speaking on behalf of your adopted stream is not as difficult as you might think. Gaining firsthand knowledge of problems, solutions, and needs allows one to speak out on behalf of Missouri's stream resources. Advocating for the resource can be done by writing a letter, sending an email, or attending a meeting to advocate for the stream's health.

Stream Teams can be one of the most important voices on a stream issue. Often, they can voice opinions on issues where resource professionals cannot. Did you know each letter to a legislator represents approximately 100 constituents? That one written letter will get the attention of a legislative aide, two written letters will prompt the aide to tell the legislator, and five written letters indicates a major issue?

Collaboration

By 1995, many Stream Teams began to think big, and it was clear that they needed help tackling larger challenges. Enlisting talents of nearby Teams for bigger projects led to the creation of the first Stream Team Association, Scenic Rivers Stream Team Association (Team 674). Currently there are 21 Stream Team Associations comprised of Stream Teams that work together for the benefit of their watersheds. Association activities vary broadly and can include educational watershed festivals, watershed management plans, or community rain garden projects.

Acting as a unified council of Stream Team Associations is the Missouri Stream Team Watershed Coalition (MSTWC). Founded in 1998, MSTWC is a not-for-profit organization made up of Association representatives that strive to promote collaboration and communication, provide funding opportunities, and serve as an advocate for stream resources on behalf of Stream Teams. Recently, MSTWC partnered with researchers from the University of Missouri to tackle the daunting task of organizing 17 years of volunteer biological and chemistry data into two State of Missouri's Streams reports. These reports enable the Program to share the results of volunteer monitoring efforts with the public and water quality volunteers. MSTWC also assists Stream Teams with tire disposal through DNR's Scrap Tire Program using the Chuck and Sharon Tryon Revolving Tire Fund, and allows Associations to use their non-profit status to receive donations and grants.

Forging ahead

As we look to the future, there is no doubt that Stream Teams will continue to find new ways to care for their adopted streams and enact positive changes in their communities. Recently, rain barrel and rain garden projects to reduce stormwater runoff have become more popular, and Teams are finding creative ways to reach their peers and elected officials using social media. Stream Teams are proof that Missourians care about clean water and know their actions can improve their quality of life, even if they have to get a little muddy along the way.