

## Stonefly Larva



**D**id you know the presence of pollution sensitive organisms like the Stonefly larva could be a sign of good water quality in streams? Would you like to learn more about the Volunteer Water Quality Monitoring Program and the quality of Missouri's water resources? See inside to find out how you can get involved.

*"The rivers are our brothers. They quench our thirst. They carry our canoes and feed our children. So you must give to the rivers the kindness that you would give any brother."*

—Chief Seattle of The Suquamish Indian Tribe

The Stream Team Program makes it possible for every Missourian to help protect our streams and rivers.



Stream Team is a partnership of

- ♦ Missouri Department of Conservation ♦
- ♦ Missouri Department of Natural Resources ♦
- ♦ Conservation Federation of Missouri ♦
- and
- ♦ Citizen Volunteers ♦



Missouri Stream Team is a cooperative program of the Missouri Department of Conservation, the Missouri Department of Natural Resources, and the Conservation Federation of Missouri. Our mission is to involve as many conservation-minded citizens as possible to protect and restore Missouri's flowing water resources.

# BECOME A VOLUNTEER WATER QUALITY MONITOR

## What is the Volunteer Water Quality Monitoring Program?

**I**t is an opportunity for citizens to learn about water quality and get involved in one of the Missouri Stream Team's most popular activities. The program provides each volunteer with training and equipment for monitoring the physical, biological, and chemical parameters of Missouri's rivers and streams.

## Why was this program developed?

- ♦ To inform Missourians about the condition of Missouri's stream resources.
- ♦ To establish a group of trained volunteers who will provide baseline water quality data for streams statewide.
- ♦ To provide a knowledge base for citizen groups who are interested in improved water quality.
- ♦ To introduce concerned citizens to one another so they can work together towards a common goal.
- ♦ To halt degradation of our stream resources by changing peoples' attitudes and behaviors.

## What is in it for me?

**F**un, knowledge, and the satisfaction that you are helping protect our stream resources are some of the benefits of volunteer monitoring. Everyone has a responsibility to protect our environment. By volunteering as a water quality monitor, you can make a difference. We need everyone's eyes, ears, and voices to take better care of Missouri's streams.

## Who can participate?

**V**olunteer water quality monitoring is open to anyone who is concerned about the condition of Missouri streams and is willing to commit time and energy for training and monitoring. It is an excellent activity for Scout groups, 4-H Clubs, teachers, landowners, and families.

## Where will I monitor?

**Y**ou may select your own monitoring site or we can help you locate a site on a stream where the state agencies have informational needs. Most monitors select a site on streams that are of personal interest to them.

## What is involved in monitoring a stream?

- ♦ Assessing physical aspects of streams using maps, visual surveys, and flow measurements.
- ♦ Biological monitoring, which involves collecting aquatic invertebrates and calculating a water-quality index based on the presence or absence of pollution sensitive organisms. Examples of aquatic invertebrates are crayfish, mussels, snails, aquatic worms, and immature stages of insects such as mayflies, caddisflies, and midges.
- ♦ Analyzing water samples for chemical parameters such as dissolved oxygen, nitrate, pH, conductivity, and temperature.



## How much training do I need?

The Stream Team Program offers four levels of training. Each class will take approximately one day of your time. Because each workshop builds upon the previous one, you will need to take each level of training in sequence, beginning with an Introductory workshop. In the Introductory workshop, the primary focus is watershed education, biological monitoring, and how to conduct a visual stream survey. As your interest and experience grow, you may choose to attend additional training.

### Additional training may include:

- ◆ Chemical testing.
- ◆ Standardization of chemical testing.
- ◆ Training to improve identification of aquatic macroinvertebrates.
- ◆ Quality assurance/quality control on sampling techniques and results.

## What equipment will I need?

As you progress through each level of training, you will receive a training notebook and reference materials as well as the sampling and safety equipment needed for conducting water quality monitoring.

## How often will I monitor?

Volunteers will be asked to collect data at their selected site at least two to four times a year, utilizing specific techniques and equipment provided by the program.

## How will the information I collect be used?

### It will be used to:

- ◆ Establish baseline water quality information for Missouri's stream resources.
- ◆ Inform and educate people about the condition of our streams.
- ◆ Follow long-term trends in statewide water quality and document changes as they occur over time.
- ◆ Locate potential and existing water quality problems and make state agencies aware of situations that may require more extensive monitoring efforts.

## How do I become a volunteer?

It is actually very simple, but requires some time and commitment on your part. The first step is to sign up for one of our Introductory workshops. The schedule for these workshops can be found on the first page of our website [www.mostreamteam.org](http://www.mostreamteam.org). Please note the registration deadline for each workshop. Space is usually limited for these training classes, so register early!

## Where can I get more information?

**Stream Team Website:** [www.mostreamteam.org](http://www.mostreamteam.org)

**Stream Team Voice Mail:** 800/781-1989

**Stream Team E-mail:** [streamteam@mdc.mo.gov](mailto:streamteam@mdc.mo.gov)

**Missouri Department of Conservation Stream Unit**  
573/751-4115  
P.O. Box 180, Jefferson City, MO 65102-0180

**Department of Natural Resources Water Protection Program**  
573/751-6623  
P.O. Box 176, Jefferson City, MO 65102-0176

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