

# Stream Health and Monitoring

Ozark Streams are wonderfully diverse, with many unique life forms. A stream food web begins with plants that gather the energy from the sun. Millions of tiny plants called diatoms and algae live on the surface of the rocks, often causing a brownish, slippery surface.

The microscopic plants feed other animals such as algae-eating fish and **macroinvertebrates**, (meaning organisms without backbones than you can see), such as crayfish, clams, and aquatic insects.

Ozark streams provide habitats for over 40 species of fish, making our streams more diverse than most other freshwater ecosystems in the United States.

## Common Missouri Macroinvertebrates



Caddisfly larva



Crayfish adult



Damselfly larva



Stonefly larva

Photos courtesy of Missouri Stream Team

Water Quality is very important to all life. There are different ways people can check the health and water quality of a stream, such as **chemical and biological monitoring**.



## Chemical Monitoring

Chemical monitoring helps us measure qualities of the water like temperature, pH, dissolved oxygen, and levels of nutrients like nitrogen and phosphorus. Bacteria levels can also be tested.



## Biological Monitoring

We can learn about the stream's health by studying the organisms living there. A healthy stream will have more biological diversity and pollution sensitive organisms than a stream suffering from pollution or other harmful impacts. Plant, macroinvertebrate, and fish communities can be used for biological monitoring to check the stream's health.



Help out for Clean Water

Get Involved!

Become Involved!

## How can you become involved?

Join active local volunteer groups such as Stream Team, Adopt-A-Stream, and Adopt-A-Spring. For more information, check the Watershed Committee of the Ozarks website at [www.watershedcommittee.org](http://www.watershedcommittee.org).