

## Streams and Creeks Prepare for Winter



Jeff Strobel photo

During the winter, most flowing surface water comes from groundwater springs and its quality is generally good.

**E**very year, about this time, it begins – winter weather. Short days, cold temperatures, snow on the ground and ice on our lakes and streams. For many people, life slows down a bit in winter. The same holds true for life in streams and creeks. Fish, insects, and other life in the creeks are still active—just at a slower pace. Let’s take a closer look at what happens to aquatic life during the winter.

### What happens to fish?

According to a stream biologist, fish get along just fine in the winter. The cold is a signal for them to leave shallow riffle areas and swim to pools and deeper runs which offer protection from forming ice. The metabolism of fish slows down in the winter so they don’t need as much food as they do in warmer weather, but they do continue to eat the insects that are still active in the creeks.

### Where do insects go?

Some insects are active all winter, but most become dormant during the coldest months of the year. Before they stop for the winter, however, special types of insects called shredders play a very important role breaking down organic material such as fallen leaves. Over the winter, bacteria and fungi further break down the bit-sized food particles left behind by the shredders. When spring finally arrives,

the shredders and other insects emerge from their dormant state and get back to work, which includes becoming food for larger creatures like frogs and turtles.

### How do frogs and turtles survive the cold?

You’re not likely to find these critters in the winter. That’s because they burrow down into the stream bottom and sides, safe from frost and predators like raccoons and weasels. When spring comes with warmer temperatures, these animals emerge from their muddy resting areas to make a living again in the flowing water.

### Where does the flowing creekwater come from when everything else is frozen?

Most of the water that keeps creeks flowing in the winter comes from groundwater springs. Some water also comes from upstream lakes and wetlands. Groundwater is usually clean, so water quality is generally good over the winter. Problems start in late winter and early spring when snow-melt and heavy rains wash over frozen ground and pick up pollutants like spread manure and wind-blown soil. Because the ground is frozen, the polluted runoff can flow right into creeks and streams. These are the problems the Watershed Project is working to correct.