

Suburban Lawn Chemicals Harmful to Aquatic Life

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Some common pesticides stored in your garage or under your kitchen sink may be more harmful to local streams and creeks than was once thought.

Pyrethroids are synthetic relatives to the natural pesticide pyrethrum, which is produced by chrysanthemum flowers. They're commonplace in many homes, and are found in many lawn chemicals, gardening products, pet shampoos and household insecticides. Pesticides containing pyrethroids are also increasingly used on farms.

When pyrethroids were first approved for use, it was assumed that they didn't harm aquatic life because they quickly settled out of the water. New research from the University of California, Berkley, however, shows that stream soils laden with the chemicals may be harmful to mud-dwelling insects and the wildlife that eat them.

Farm runoff may contribute to the problem, but manicured suburban lawns may be more to blame. Pesticide application by homeowners is not regulated, and often too much chemical is applied for the job at hand. Pyrethroids are washed into waterways from yards when rain and lawn sprinklers carry lawn runoff into stormdrains and ditches. These, of course, eventually drain to local waterways.

When lawn runoff enters local creeks and lakes, aquatic insects appear to be most affected. The chemicals found in the runoff damage their nervous systems, as most insecticides do. Fish, birds and other large aquatic organisms may be indirectly affected as their mud-dwelling food sources decrease in numbers or disappear.

Products containing pyrethroids are currently up for review by the Environmental Protection Agency, as are all pesticides that were registered before 1984.

In many cases, common lawn problems can be solved without the use of pesticides. If you have weighed all the options and have decided that pesticides are the only solution, carefully read the label and follow all instructions on how to apply them properly. Excessive application could cause the pesticide to run off or seep into water supplies and contaminate them. Never water your lawn after applying pesticides.

If a spill occurs, clean it up promptly. Don't wash it away. Instead, sprinkle the spill with sawdust, vermiculite, or kitty litter. Sweep it into a plastic garbage bag, and dispose of it as directed on the pesticide product label.

For more suggestions on healthy lawn care practices, visit <http://www.gardening.cornell.edu/lawn/index.html>. If you have questions about products containing pesticides, contact your local Cooperative Extension office: <http://www.cce.cornell.edu/>