

Just for the *health* of it

There has been much concern lately about the water quality here at our lake and rightly so. We all share common concern for this topic whether we are fishing, skiing, swimming, boating or merely gazing upon our prized asset.

Clearly, this is a large and very complex issue not easily defined or managed when so much of what affects the watershed is spread among multiple local areas and is some distance from our shoreline. The intent of this article is to focus on one small area of lake health—the use of residential lawn chemicals.

There are some measures each household can take to improve lake water quality, save some money, and get a

little exercise as a bonus. The issue is the use of residential lawn care products, whether done by homeowners or by a service. There are hundreds of lawn products available but they all fall into one of three categories: insecticides, herbicides and fertilizers. Many combinations of all these products are available for purchase or are used by commercial lawn care services to attain the “perfect” lawn. But there are many disadvantages to these products:

For starters, we expose ourselves to these chemicals by absorption through the skin, by breathing the airborne particles and vapor, or by ingestion. Children and pets living in households using lawn care services have

higher rates of lymphoma and the chemicals have been associated with immune-response

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deficiencies, neurological diseases and birth defects.

One CDC study of over 9,000 people found measurable chemical residue in everyone tested, including infants. And

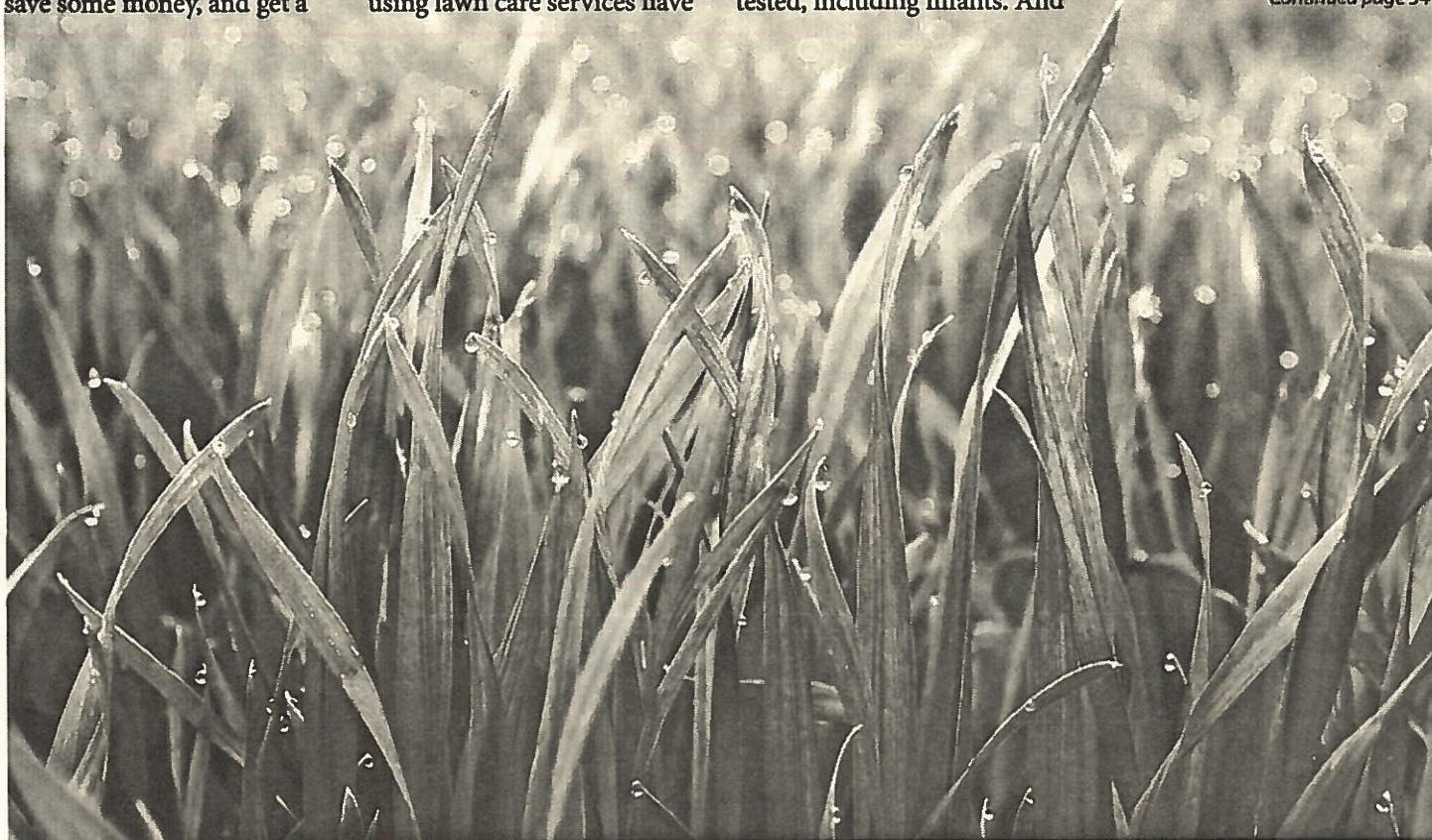
the use of lawn chemicals accounts for the majority of wildlife poisonings reported to the EPA—it takes only one granule of dioxin to kill a bird.

In addition, these products are expensive. In 2015 Americans spent \$29.1 billion on lawn care, and lawns are the most irrigated “crop” in the entire nation.

What can we do?

If you can't give up your lawn service, ask the company to provide an organic alternative or apply a reduced concentration of chemicals. Ask to see a list of all their products and application amounts, and in your spare time you can

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look up the risks on the state/federal EPA websites. No company has yet provided such a list to consumers that I know of. Ever wonder why the technician wears those heavy rubber boots?

If you are a DIY lawn care practitioner please read and follow all directions and use an absolute minimum amount of product. A fertilizer with the lowest concentration of phosphorus is the best choice, and lawns are best fertilized once a year in the fall. The natural/organic products are available at some local garden centers and can be found on the web. As consumer demand grows, so will availability.

Phosphorus is a big culprit that negatively affects lake water, and the biggest source is lawn fertilizer. By using a low-phosphorus formula and switching to a mulching mower, you lower your fertilizer requirements by 30%. As a bonus, a natural lawn is so much better for parking visiting cars!

Also...

There are a few more mechanical techniques and projects that can work to further improve the water quality. For many reasons, riparian borders are not a popular solution although they are very effective. One article recommends using the entire yard from house to lake for the barrier, but we're never going to that extreme. How about making a mini riparian

barrier by mowing your lawn to only a 3-inch height consistently? An easy fix that requires a minor machine adjustment by you or your lawn service, resulting in cleaner water instantly.

If you have a free weekend, some friendly family or neighbors and a rototiller, you can consider making a rain garden, bog, or minor catch basin close to the lake/lawn edge. This slows down the runoff, allowing it to percolate into the ground water or lake in a much cleaner state. You can have some fun, get some fresh air and skip the gym for at least one day—and don't forget to ice the drinks!

There are many online options and instructions to choose from, and a few local landscapers who might be helpful. And don't forget the Penn State resources that are nearby at the Conservation District offices and the Mercer County Extension Office.

Good neighbors care about clean water and each other. One last suggestion for helping the water quality—plant a tree!

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