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RED, SET, GO! Always in Fashion

Built Upon Trust

Devising a Creative Triumph

Fire and Ice Opposites Attract





By Mary Ellen Ternes



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t will soon be planting season, and I've been wondering about available methods to achieve the same spectacular results in landscaping with less - less chemicals, less water, less fuss. Alas, I am not a gardener (gaining some skill therein is on my list, along with vinting and throwing pots). Thankfully, there are actual horticulturists, master gardeners and other resources to teach us how to best conserve water and reduce yard waste. They can also help us choose the best plants for our climate and soil type, letting us minimize the amount of chemical support our gardens need to show off.

Remember that if we're not careful, the chemicals we add to our gardens can end up in the river as water pollution. When these pollutants – soil, sediment, grass clippings, chemicals from pesticides, nutrients from fertilizer and pathogens from pet waste – are washed from our lawns into the storm sewer, they receive no treatment. The contaminated water is all washed to the river, where it harms fish, makes swimmers sick and requires treatment by someone downstream before they drink it. Plus, it keeps our rivers on Oklahoma's list of "impaired" waters.

We can avoid this result in three ways: pick the best plants, don't overapply chemicals, and don't overwater. The ideal plants for our soil and climate don't need as much artificial chemical support. Barring special issues that could be discovered via a soil sample analysis, consider which plants are generally best suited to Oklahoma growing conditions, including plants that flourish in U.S. Department of Agriculture "Hardiness Zone 7," defined by the average annual minimum temperatures for each zone, in our case zero to ten degrees Fahrenheit. There are many varieties known to resist disease here in Oklahoma. Why not pick some of these and avoid a whole lot of trouble?

Now, fertilizers and pesticides. Fertilizer's primary purpose is to provide nitrogen and phosphorus, but plants can only achieve a certain "uptake" of these nutrients each season – an amount affected by moisture, temperature and soil characteristics that affect growth. Also, some plant species simply need less than others, and some might even get burned by too much! To avoid applying nutrients blindly and risk overapplication, test your lawn and garden soil and follow fertilizer application recommendations, like the ones offered by Oklahoma Cooperative Extension Service. Remember, if we apply too much fertilizer, we could be harming our plants, in addition to wasting it and creating nutrient water pollution.

Pesticides are used to prevent disease in plants, as well as keeping out plants we don't want. However, if we carefully avoid choosing plants prone to disease and perpetuating those conditions which encourage disease, we can minimize our use of pesticides. Disease can begin as soon as we plant our seeds, caused by fungi, bacteria, viruses, mycoplasmas (weird bacteria that have no cell walls) and nematodes (round worms or "ick"). Careful sanitation practices are required to isolate and remove diseased plants and plant parts, but automatically reaching for a heavier dose of chemicals isn't the best answer, because it doesn't fix the problem. To move toward a more "organic" method of gardening, we need to focus on cultural and sanitation practices as a means of non-chemical disease control. That's something to study up on. In the meantime, be careful and follow the directions when applying chemicals – they can be really dangerous.

We can avoid overwatering in any number of ways: soaker hoses, drip irrigation, using more narrowly directed lawn sprinkler systems, not watering concrete (it doesn't grow much), etc. But remember too that, depending upon how we've chosen our plants, different varieties might need different levels of moisture in the soil. Some may rot while others flourish. It might be worth trying one of the many soil moisture meters to keep better track of local moisture conditions, use water strategically and conservatively and stay ahead of disease.

And finally, do we know what to do with our landscaping waste? Yes! Compost it! I personally like the compost "tumblers" that you can hand-crank to turn over, aerating it and creating nice, rich mulch. Probably just chock full of nematodes. Don't forget those gardening gloves.

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BE INFORMED

To immerse yourself in landscape and gardening with experts and Master Gardeners, attend the City of Nichols Hills Second Annual Landscape Forum on February 11 at All Souls Episcopal Church, 6-7:30pm.

For general knowledge, see Know It and Grow It, A Guide to the Identification and Use of Landscape Plants, by Carl E. Whitcomb, Ph.D.

To answer gardening questions, see Lawn, Yard and Garden information sheets from the OSU Division of Agricultural Services and Natural Resources at pods.dasnr.okstate.edu/docushare/dsweb/ View/Collection-389

For more information on Non-Chemical Methods for Controlling Diseases in the Home Landscape and Garden see OCES EPP-7652 at pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-2309/ EPP-7652web.pdf

Mary Ellen Ternes, Esq. is a former chemical engineer from both the EPA and industry. She is currently a shareholder with McAfee & Taft and co-chair with Richard A. Riggs, Esq. of its Renewable and Sustainable Energy Group, and is serving a three-year term as City of Nichols Hills Environment, Health and Sustainability Commissioner.