

Ogunquit, Maine Voters Choose to Protect Health and the Environment

Rachel Carson would be proud of the Mainers in Ogunquit who on Election Day passed a ballot initiative, with 60 percent of the vote, to ban toxic pesticide use on lawns and landscapes within the town's jurisdiction. As if guided by Ms. Carson's 1962 book, *Silent Spring*, the Ogunquit Conservation Commission began the community discussion on this trailblazing ordinance –different from numerous pesticide ordinances in Maine and throughout the nation, including a previous one in Ogunquit, because it restricts lawn and landscape pesticide use on all property, public and private, throughout the town.

A bright spot on election day

The passage of Ogunquit's referendum is a bright spot during an election cycle that saw the defeat of referendums to label food products with genetically engineered ingredients in the West.

A marine biologist, Ms. Carson warned the nation that our appetite for pesticides raised grave concerns about the effects of chemical-intensive practices, our relationship to nature, chemical effects at the cellular level, and insect and weed resistance to chemical controls. Of the 30 most commonly used lawn pesticides, 17 are linked to cancer, 18 are endocrine disruptors, 19 are reproductive toxicants, 11 are linked to birth defects, 14 are neurotoxic, 22 cause kidney liver effects, and 25 are irritants. The U.S. Geological Survey has linked lawn pesticide use to runoff into waterways.

Ms. Carson wrote, "By their very nature, chemical controls are self-defeating, for they have been devised and applied without taking into account the complex biological systems against which they have been blindly hurled. The chemicals may have been pretested against a few individual species, but not against living communities." She warned us to protect the diverse organisms that make up a healthy ecosystem, including bees, birds, butterflies and other pollinators.

Protecting the pollinators

The Ogunquit ordinance is timely, given that we are currently experiencing the worst decline of bee populations in history. Their demise is linked to a constellation of factors, most prominently neonicotinoid insecticides. These are systemic pesticides that make their way through the vascular system of the plant and are expressed through pollen, nectar, and guttation droplets, effectively poisoning foraging or pollinating insects, and persisting in soil and waterways.

Ogunquit is on the leading edge of communities seeking to stop involuntary poisoning and non-target contamination from runoff, pesticide drift, and volatilization that occurs as toxic chemicals move off of treated private yards. The ordinance is similar to a law adopted by the city of Takoma Park, Maryland, following bans on cosmetic or aesthetic pesticide use on lawns that have been in place in Canadian provinces for many years. Maine is only one of seven states nationwide that allows municipalities to adopt standards more stringent than state restrictions. The remaining 43 states have some type of preemption law that limits ordinances to only locally owned public property.

The action in Ogunquit leads the way to the widespread adoption of effective non-toxic land management. As Ms. Carson wrote, "To assume that we must resign ourselves to turning our waterways into rivers of death is to follow the counsel of despair and defeatism. We must make wider use of alternative methods that are now known, and we must devote our ingenuity and resources to developing others."

Chemical-intensive turf and landscape management programs are generally centered on a synthetic product approach that continually treats symptoms. In fact, toxic chemicals are not needed for successful turf management. Rather, a systems approach incorporates preventive steps based on building soil biomass to improve soil fertility and turf grass health, organic products based on a soil analysis that determines need, and specific cultural practices, like mowing height, aeration, dethatching, and over-seeding.

Organic turf management, which meets the standards of the *Organic Foods Production Act*, is a "feed-the-soil" approach that centers on natural, organic fertilization, microbial inoculants, compost teas, and compost topdressing as needed. This approach builds a soil environment rich in microbiology that will produce strong, healthy turf able to withstand stress.

The Ogunquit ordinance is not just about banning pesticides, it is about respecting biological systems that are central to the sustainability of our environment.

Wastewater contaminates food supply

This issue features reporting on some troubling research findings on food contamination with pesticides and pharmaceuticals from treated wastewater used increasingly in agriculture. While the reuse of water is important with widespread water shortages, the chemicalization of society has resulted in contaminants of emerging concern (CECs) that are not removed even by high level water treatment. Therefore, we are seeing DEET, triclosan, antibiotics, caffeine, and the anti-depressant carbamazepine in food grown with irrigated wastewater.

Hedgerows

The wastewater debacle is yet another urgent reason to get off the chemical treadmill. The treatment technology either doesn't exist or is extremely costly. So, shifting to organic management practices, which, are less water dependent, provides the sane course forward, and as we explain in this issue, the development of hedgerows in communities and on farms improves the environment – protecting and improving biodiversity and a balanced ecology. This is where we must put our resources.



Best wishes for the holiday season!

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