

Bogged down: Water-wise gardeners get the flush

It was an exhilarating, terrifying storm – the kind where you watch the sky, *ooohing* and *aahhing* with each flash and crack, wondering how the cats are coping with the noise, rain and wind. My friends and I sat on the porch as the cold front moved in, bringing with it a torrential downpour. Across the city, thousands of basements were flooding, ravine banks were collapsing and low-lying roads were being swamped with water, dead fish and broken tree limbs. As we chatted, occasionally cowering at a particularly violent burst, we raised our glasses to salute the force and power of this rain. The storm felt cleansing, and so we gave little thought to the rivers forming on the street or to the pollution being picked up from roads and driveways and lawns and swept into sewers. If we had turned our attention to this soupy mix of old oil, animal waste and fertilizer runoff, we could easily have predicted exactly what happened: Toronto's aging and overloaded sewers released the storm's contaminated load directly into rivers and the lake.

On Mulgrove Drive in Etobicoke, just a few kilometres away from where we sat watching the storm on that spring night in 2000, rivers of water gushed into stormwater ditches – shallow, grassy depressions that run alongside the road. Although grass is permeable, it is hardly better than pavement at slowing the flow of fast-moving runoff. So, during heavy storms, water on Mulgrove Drive runs along the ditches and into the storm sewers, and is transported to Renforth Creek and then into Etobicoke Creek, completing its journey south to Lake Ontario near the beaches at Marie Curtis Park. Whatever gunk it has picked up along the way is dumped into the lake. It's no wonder the beach at this park is regularly closed to swimming in the summer.

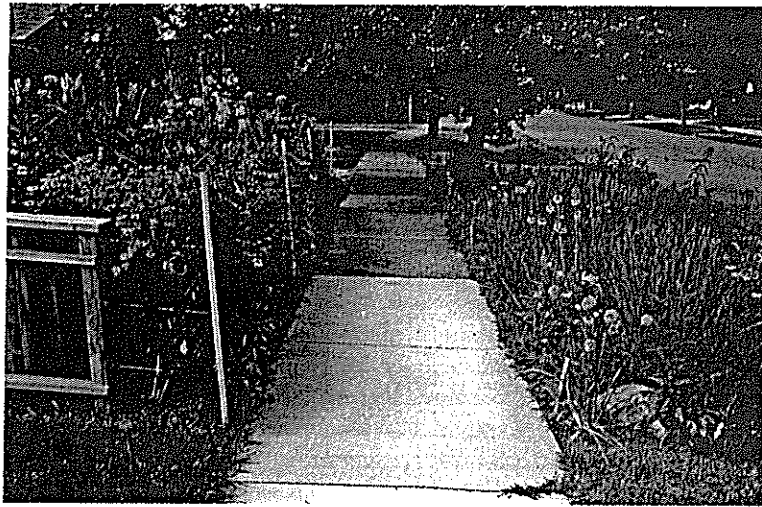
One of those stormwater ditches on Mulgrove Drive stands out, though. Planted with native wet-meadow species instead of regular turf grass, and boasting more than forty different varieties of wildflowers, sedges and native grasses such as columbine, fox sedge and little bluestem, the ditch garden slows the flow of water and encourages it to seep into the ground. This act of biomimicry – defined as design modelled on nature – is the work of Douglas Counter, the gardener who lives at 52

Mulgrove Drive and who created this planting – an extension of his front-yard meditation garden – with an explicitly environmental goal in mind. Douglas, a graphic designer whose meticulousness in his professional work is matched by the tough but tender care he lavishes on his garden, remembered his father's stories of swimming at Sunnyside Beach as a child, recognized the connection between storm runoff and polluted waterways and decided to do something about it. He looked to nature, considered the wet meadows that form in low-lying areas and found his inspiration in the moisture-loving native plants that flourish in these natural conditions. Combining nursery catalogues, he chose plants for beauty and function, his designer's eye creating a lush and colourful combination of species to enhance water infiltration. His garden is a small-scale, local gesture toward a cleaner lake. When it rains, there's little runoff. The water goes where it should: deep down into the earth.

A few months after that violent storm in 2000, Counter received a letter from a City of Toronto lawyer that warned that his ditch planting was 'an unauthorized use or occupation of the City-owned road allowance in a way that creates a safety hazard to vehicular and pedestrian traffic.' Counter was given two choices: remove his ditch garden or apply for a permit to plant in the ditch at a cost of \$700 plus an annual fee of \$630, a permit that any neighbour within sixty-one metres of his property line could oppose. In addition to these conditions, he would also be required to get \$1 million in third-party injury and property damage insurance. He was given until December 8, 2000, to remove his garden and replace it with sod.

Counter had no intention of tearing up his garden, however, and it seemed the weather was on his side. On December 7, the first snowfall of the year began at dusk and didn't let up until the next morning. The ditch at 52 Mulgrove was buried under a foot of snow, dried seed heads flattened by the force. This was the beginning of a winter of unprecedented snow cover in the city, of one-metre-high snowbanks along the sides of roads courtesy of City plows, of drivers peering around huge obstructions while backing out of driveways onto slippery roads. It was also the beginning of Counter's legal battles to defend his ditch.

The Ontario Superior Court of Justice is not normally the place where heated debates about field pussytoes, prairie smoke and swamp milkweed take place. And it's rare that a



Douglas Counter's front-yard and ditch gardens.

garden is at the centre of a constitutional argument. But in the case of *Counter v. City of Toronto* (2002), Counter's lawyers argued that the City's bylaws violated his right to freedom of conscience, religion and expression as guaranteed under the Canadian Charter of Rights and Freedoms. Picking up on a 1996 case in which Toronto gardener Sandy Bell had successfully challenged the City's Grass and Weeds Bylaw, which arbitrarily limited some plants to a height of eight inches, Counter's lawyers argued that he should have the right to express his environmental values through his ditch garden, even if it was on City property. The court agreed, concluding that 'while it is not the purpose of the by-laws to constrain expression, it is their effect.' Ruling that Counter's ditch garden was protected by the Charter's freedom of expression clause (a decision later upheld by the Ontario Court of Appeal), the court recognized – for the first time in Canada – that citizens have the protected right to express pro-environmental values on public land, subject only to safety considerations. Counter could keep his ditch garden (despite all the dark talk about hazards, no alterations to Counter's planting were required for safety reasons), and other citizens could follow his lead.

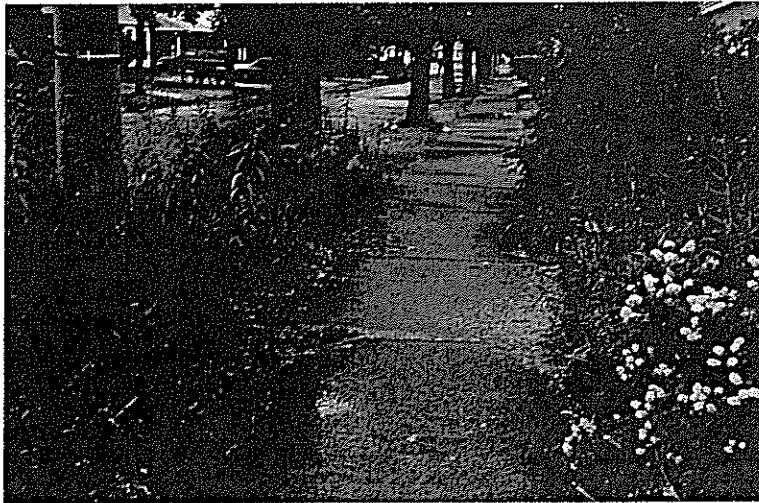
The judge was explicit in his written ruling that the City should be helping gardeners like Counter by drafting policies. In it, he wrote that 'it seems to me it has now become critical that the City develop and implement a coherent strategy to deal with natural gardens, which all agree [sic] have become



Douglas Counter's ditch garden.

increasingly popular.' Later in his judgment, he returned to this theme: 'I repeat that the City can and ought to avoid problems of this sort by developing and implementing specific guidelines to deal with the critical issue of natural gardens and their enormous environmental significance.'

Instead of building on this opportunity to encourage small-scale solutions to stormwater runoff, however, the City has remained silent on the subject of ditch infiltration gardens. There are no guidelines as to height limits, no details as to what constitutes a safe design, no standards by which to evaluate compliance. Counter has researched what other cities are doing and points to Seattle as particularly forward-thinking: 'Under their SEA [Street Edge Alternatives] Street program, residential streetscapes have been re-engineered to mimic nature's function. Paved road surfaces have been reduced, and planted swales have been created along road edges to act as stormwater infiltration gardens. Complementing this, the City promotes the conversion of lawns to native gardens.' Counter would like to see something similar in Toronto: 'The City should develop clearly defined and easy-to-follow guidelines that don't infringe on natural gardeners' hard-won rights.' While policies to guide boulevard gardeners are lacking, Counter's own garden continues to flourish. Passersby stop almost daily to see what new flowers are blooming, and Counter no longer worries that City workers will show up with power tools. His garden, for a while



Deborah Dale's bog garden, pre-razing.

a private/public battleground, has returned to its quieter days as rain-nourished growing ground.

At the opposite end of the city, in Scarborough, Deborah Dale, a biologist with the quiet, self-deprecating demeanour of someone who prefers the sidelines to the spotlight, has also been engaged in a small-scale solution to the runoff problem, never dreaming that her efforts would draw unwelcome attention. In the late 1990s, she disconnected her downspout from the City sewer (something homeowners were encouraged and are now required to do through the City's Downspout Disconnect program) and created a bog garden at its base. Like Counter's planting, Dale's small bog was a landscape modelled on nature, with water treated as a resource, not a problem. The downspout directed each heavy rainfall's inundation to plants happy for a soaking. Instead of running into the sewers, the water nourished Dale's bog.

Until August 21, 2007, that is, when Dale came home to a scene of total destruction. Her front garden – mere hours ago made up of an array of native species such as butterfly milkweed, vervain, culver's root; shrubs such as New Jersey tea, swamp rose and grey dogwood; and trees such as red oak and pawpaw – had been razed, a decade's worth of effort reduced to shorn stubble. She phoned the police, only to discover that her front garden – the bog garden, the boulevard garden, even trees and shrubs – had been cut down by the City.



After.

A couple of days later, Dale was served notice of other alleged infractions in her backyard: weeds, heavy undergrowth and dead branches on the interior of a pine tree (branches on which Dale had hung birdfeeders). She appeared at a Property Standards Committee hearing to defend herself against the allegations and to ask what 'weeds' they were talking about (she was not growing any species on Ontario's Noxious Weeds list), and to find out what was meant by 'heavy undergrowth' (one person's heavy undergrowth might be another person's successful groundcover). The committee discussed each allegation without any further action required by Dale on any of the complaints. However, Dale was told that the committee was going to order a fire inspection of her back garden; there were concerns that the mulch in her garden (mulch used by gardeners everywhere, including the parks department) was a fire hazard. At the close of the hearing, Dale's lawyer served the City with papers initiating a lawsuit.

No court date has been set yet, but there's no doubt that Dale's maintenance practices will be intensely scrutinized should this battle reach the courts. Time will be spent debating 'construction debris' (the inspector's term) versus 'Pennsylvania limestone to be made into a pond' (Dale's characterization). Perhaps the spectre of the dead raccoon will be raised – Dale says it made its appearance on her property around the time the City workers showed up, but that they didn't take it away, despite the City's program to remove

CREATING A BOG GARDEN

With minimal materials and about an hour's work, you can create a bog garden that will help prevent stormwater from overloading Toronto's antiquated sewer system.

The best place for a bog garden is at the base of the downspout that drains water off your roof. If the downspout empties close to your house (say, within a foot), consider buying some kind of extension tubing (vinyl tubing is available from any hardware store) and connect it to the downspout in order to move the drainage water farther away from the house.

Dig a hole that's approximately 12-18 inches deep, with sloping sides, and as large as you want your bog garden to be (it should be a minimum of 2 feet wide), at the downspout base. Line the hole with plastic sheeting, into which you've punctured small holes every 6 inches or so. Cover the lined hole with the excavated soil, and you're ready to plant.

Moisture-loving native species are best. These include sedges such as tussock sedge, wildflowers such as joe-pye weed, swamp milkweed and vervain. You can even get fancy and include carnivorous bog plants such as the pitcher plant, which digests insects the plant traps in its 'pitcher.'

Water well after planting and, if there's no rain, every two days for the next couple of weeks, or during times of drought.

dead animals should a citizen call for the service, Debate will again rage over the aesthetics of someone's gardening choices. Function – the role of a bog in the hydrological cycle, the good that gardens can do – will most likely take a back seat to phantom fears of spontaneously combusting mulch.

One of the stranger lessons of these stories is that the universe loves irony. Before his garden was threatened, Douglas Counter had designed a brochure, published by Etobicoke's Parks and Recreation Services, that urged homeowners to plant boulevard gardens. The week before Deborah Dale's garden was cut down, she had taught a seminar funded by the City and the TRCA's Community Program for Stormwater Management on how to create downspout bog gardens. The ironies pile up: Counter's garden has been featured on numerous television programs, and an image of his garden appeared on an award-winning Canadian postage stamp. Deborah Dale's garden was a finalist in the water-conservation category of the City's 2008 Toronto Green Awards. The convergences don't stop there; Douglas Counter was a director of the North American Native Plant Society for a couple of years and Deborah Dale has been a NANPS director for a decade, including a stint as president. Seems like a dangerous board on which to serve. Indeed, Sandy Bell, the gardener whose own successful court case over a naturalized planting on the front yard of her Beaches home led to the City being forced to provide a 'natural garden' exemption in its Grass and Weeds Bylaw, was a NANPS director in the 1990s. These gardeners are not the only ones being challenged by the City for their naturalized gardens – they just happen to be the ones who have persevered, taken the City to court and, in each case to date, won significant advances for the naturalization movement.

The summer of 2008 brought what seemed like daily storms to the city. Afternoon dramas of dark thunderclouds and crashing downpours scattered people on mad dashes for the protection of porches and store awnings. Streets temporarily became rivers, and raw sewage splattered Sunnyside Beach. Our technologies failed us. Or, rather, we failed to find one of the technologies already at hand – the technology of trowels and plants transforming impermeable surfaces into absorptive sponges that take water where it needs to go. And storms will continue



Douglas Counter's garden goes postal.

to brew. What if, instead of fighting these occasional battles caused by the disconnect between City policy, City regulations and innovative individual actions, we rewarded gardeners for wise-water policies? Numerous City departments (Parks, Forestry and Recreation, Toronto Water, Clean & Beautiful City, Toronto Environment Office) already promote naturalized gardens. How about tax breaks for naturalized yards – bucks for bogs and boulevards? Not just safety policies, but energetic promotion of boulevard plantings. Green teams that work with homeowners, school boards and community groups to create demonstration bog gardens, ponds, swales and wet meadows in yards, schools and parks. Toronto has spent millions trying to solve the 'problem' of stormwater, and thousands on court cases over naturalized gardens designed so that water seeps into the ground. How long before this simple idea soaks into the city's consciousness and percolates deep down into a policy of garden protection and, dare we dream, meaningful infiltration- and bog-garden encouragement?