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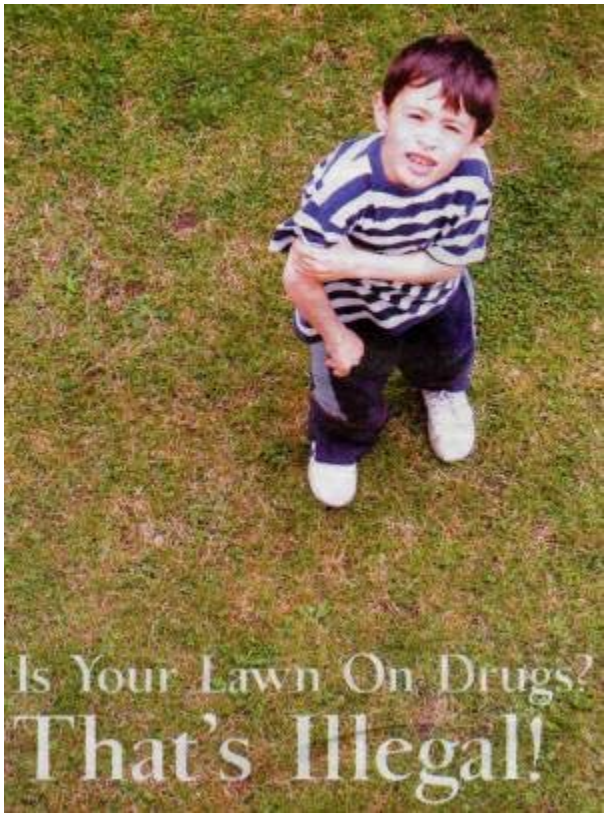

Or at least, it soon will be. Watch for a crop of new by-laws springing forth in the Lower Mainland, Vancouver included. All it took was – uhmm – 30-plus years of campaigning

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Tell Michael, 11, and Boyd, 10, the news of Vancouver's pending "cosmetic pesticide" ban and they're more polite than excited. Clearly, they'd rather get back to their impromptu soccer game. But local environmental groups and activists are thrilled that the patch of grass where they and other children play will become a safer space.

"We play here a couple times a week," Michael says of the East Van residential area, a soccer ball constantly moving at his feet. "We do sit down sometimes. Hang out. I guess it's a good thing there'll maybe be less chemicals."

"What's a pesticide?" Boyd asks. "Oh, chemicals. Yeah, that's good."

What these boys don't realize is that they're reaping the rewards of more than 30 years of a nation-wide reduced-pesticide movement. More than 60 Canadian towns and cities have now banned pesticides for cosmetic purposes.

And- pesticide-makers, take note. That's just for starters.

On this side of the land, Port Moody got the ball rolling. It recently passed B.C.'s first cosmetic pesticide bylaw for private lands.

Now, city councils in both Vancouver and New Westminster have instructed staff to prepare by-laws that will put them in line with Port Moody.

And at writing, it appears as if a domino effect could now be falling into place throughout the whole Lower Mainland. Richmond, West Vancouver and North Vancouver City are all considering similar laws.

So what's caused this wave of anti-pesticide by-laws? It's actually delayed reaction to decades of growing concern over the health and environmental effects of unnecessary pesticides.

But wait. As Boyd asks, what is a pesticide, really? Actually, it's a pretty broad group. BC's *Pesticide Control Act* (1997) defines a pesticide as "any substance or mixture designed to prevent, destroy, repel, attract, or mitigate any pest." And "pests" can include insects, birds, rodents, unwanted plants (weeds), or micro-organisms (bacteria, fungi, viruses).

That's a lot of cans in your basement. And all could soon be contraband – if they're used for the sake of mere appearance.

It may be too soon for people to know exactly what will be banned in the future. But who among us hasn't heard, by now, of the risks posed by these chemical concoctions?

Pesticides spread through the air with little discrimination for their intended target. So they often end up in our soil or local waters. Many linger in our environment for decades, affecting wildlife and ultimately showing up in our food and drinking water supply as pesticides residues.

Yet when it comes to health effects, what we *don't* know is far greater than what we know.

Most pesticides available today were on the market before rigorous testing was required. Other pesticides have been evaluated only for toxicity of their active ingredient, and not for inert ingredients such as spreading agents or solvents.

As any doctor can tell you, short-term exposure to these toxins has been associated with symptoms ranging from headaches and allergic reactions to vomiting and even death.

Organic Care Group has SOUL

Going organic has now got a lot easier for the 1/5 of Vancouver households who hire professionals to tend their lawn and garden.

Perhaps the biggest change is due to SOUL – the Society of Organic Urban Land Care Professionals. The philosophy of this new organization is that pesticide use degrades soil life and decreases biological activity. In contrast, they feel that the well-nourished soil of organic horticulture acts as a foundation for a healthy, disease-free lawn or garden.

Based in Victoria, but with members across B.C., SOUL was formed, says their website, to "respond to the growing need for ecologically responsible land care practices."

"We were very concerned about the stance taken by the landscaping industry on pesticides," says director Heide Hermary, also one of the original founders. "Integrated pest management still proposes continued pesticide use. We decided we didn't want to be part of it."

Organic horticulturalists use design, installation and maintenance principles that maintain the health of the entire ecosystem. No chemical fertilizers or pesticides are used. Beneficial micro-organisms are reintroduced into the soil through compost and other natural fertilizers.

In the past two years, SOUL has been working on its own foundation. This has included developing organic *ornamental* standards. These standards – the first in Canada – are only the second of their kind in the world. And they're offered free of charge on the SOUL website.

SOUL has also developed a certification program for organic landscape professionals – this time an international first, say's Hermary. SOUL's current 27 members are certified to possess basic experience in true organic practices.

For people who have gardening experience, but no formal education in organic horticulture, SOUL has also set up comprehensive online programs on organic turf and landscape management. These 32-week programs are offered through Gaia College Inc. every three months.

Hermary says the trend towards decreased pesticide use is none too soon. "As landscapers, we're so exposed."

In her experience, yard and garden workers have the most health problems from pesticides. What's more, she says, "pesticides don't work. You need more and more. They destroy the balance of life. They're not pest specific. They kill everything, even natural predators of pests. What you're left with is something sterile. That's when real disease takes hold."

Yet it's the long-term health problems that concern scientists the most. These include reproductive problems such as low fertility, plus liver and kidney damage. Among the cancers linked with pesticides now is childhood leukemia.

"Neurological problems, birth defects, you name it," states Thelma MacAdam, long-time chair of the Environmental Committee for Health Action Network Society, a local non-profit consumer group. "Pesticides aren't good for anybody, but children are most at risk."

According to macadam, immature immune systems aren't at full strength to defend against chemical hazards. On top of that, she says, "a child's body weight ratio is lower. A small dose for an adult is a massive dose for a child."

MACADAM IS ONE of the many Canadians who have campaigned for may long years to make our lawns and gardens safe for kids.

She first joined the pesticide awareness movement back in 1972. She started by floating helium balloons above her Port Coquitlam home to protest the blanket aerial spraying of Malathion for mosquito control. In the 32 years since, she has spoken to school boards, hospitals, the media, and every age of classroom, including a horticulture class at the BC Institute of Technology.

Nowadays, one of her key concerns is the hormonal effect of many pesticides on our youth. These estrogen mimickers (*xenoestrogens*), have been linked to many developmental problems, especially early adolescent development.

Kids are also more at risk because they often engage in activities where unwitting pesticide exposure is likely, such as playing on the ground, then touching their moths. Absorption through the skin is the most common methods.

Bad news for Michael, Boyd and their buddies who could be inadvertently receiving doses of a neighbour's lawn spray. Nearly 10% of Vancouver's population is 10 and under.

Says MacAdam, "It's not really private when you spray your lawn, because you can't confine it. What about your neighbours?"

So after decades of growing concern, the federal government is re-evaluating certain groups of pesticides for home and garden use. Some pesticides have now been getting pulled off shelves, either voluntarily or by ban. But many towns and cities – tired of waiting – are making their own local changes.

THE PUCK DROPPED IN 1991, THE YEAR THAT Hudson, Quebec, passed the first cosmetic pesticide bylaw in Canada.

That one hit the net. Two lawn-care companies promptly took the town of Hudson to court.

Recipe for a Non-Toxic yard

CONTROL LAWN WEEDS WITH CORN GLUTEN. A non-toxic byproduct of corn processing, corn gluten kills many weed seedlings within days. It also adds nitrogen to your soil. Just one application before weeds emerged reduced weed survival by 60%, according to research at Iowa State University. After several years, this method provides as much as 90% weed control. Apply twice a year – first in spring before soil reaches 55 degrees, and second in late summer.

MULCH GRASS CLIPPINGS ON THE LAWN. This is one of many forms of organic lawn nourishing that strengthens the resistance of your lawn to weeds. Sometimes referred to as "grass-cycling," it provides nutrients equivalents to one application of fertilizer. Mulching mowers are available that help clippings hide in the grass.

HAND RAKE. If clippings are too long and must be raked, try hand raking. This light aerobic exercise will save you a trip to the gym. And if you have fallen leaves to rake, don't burn them; they make excellent mulch for flower and garden beds. Or, if you add them to your compost pile, they'll be converted to rich, organic humus for the garden.

OBSERVE THE WEEDS. Dandelions thrive at a pH level of about 7.5 and are a sign to add gardener's sulphur to lower the pH. *[Actually dandelions are indicators of **low** pH – Heide]* Clover and Black medic are a sign that your lawn may be nitrogen poor, and needs compost or a nitrogen-weighted fertilizer.

FERTILIZE ONCE OR TWICE A YEAR. This is sufficient for an attractive lawn. Cool season grasses are semi-dormant in the summer; fertilizing during summer will be ineffective. Fertilizing in early fall promotes vigorous lawn growth during the next spring.

USE A FERTILIZER WITH TIMED-RELEASE, WATER INSOLUBLE NITROGEN. These fertilizers are less likely to burn your lawn with excess nitrogen, and slow release allows the roots to absorb the nutrients as needed.

WATER DEEPLY, LESS OFTEN. Daily, shallow watering discourages your lawn from developing deep, strong roots. Deep watering every one or two weeks is better.

Finally, 10 long years later (June 2001) The Supreme Court of Canada ruled that municipalities do have the right to enact local pesticide bylaws.

But demand must have been pent up after such a long delay. Because already a trend has spread, affecting more than 60 Canadian cities, including Halifax, Ottawa, Toronto and most of metropolitan Montreal.

Here in B.C., municipalities with pesticide reduction or integrated pest management plans on public lands now include Vancouver, Burnaby, Maple Ridge, North Vancouver, West Vancouver, Coquitlam, Richmond and Surrey.

And the next stage will be the actual banning of cosmetic pesticide use on private lands – as should occur by January 1, 2006 in Vancouver, New Westminster, Port Moody and likely other neighbouring cities.

ACTUALLY, IT WAS BACK IN 1987 that Vancouver adopted its own integrated pest management policy. So cosmetic pesticides haven't been used on Vancouver Park Board playgrounds, sports field or turf areas in more than a decade. Pesticide use on municipal golf courses, while no eliminated, has also been reduced.

But this still left children exposed through chemical use on private lands. So a bylaw addressing not just public but private property seemed the logical next step. Residential lawns and gardens represent nearly ¼ of Vancouver's land area. And fully 2/3 of homeowners report pesticide use, according to a February 2002 survey.

Yet those numbers will inevitably drop with Vancouver's upcoming education campaign. Expect to see advertising on reduced pesticide use, as well as

information on a new disposal program for non-recyclable pesticides. Bylaw offenders will be punished by fine.

That's certainly a relief for the veterans of this long campaign.

"We're really encouraged by what's happening on the pesticide front," says Ivan Bulic, co-ordinator for Vancouver's Society for Promoting Environmental Conservation (SPEC). SPEC has actively driven the by-law changes in this region. It's also run public education campaigns on pesticides – since way back in the early 1970s.

And Bulic himself has played his own major role. Witness his recent pro-bylaw presentations to city council chambers through the region. As he explains it, SPEC's approach is to actively assist BC municipalities as they undergo change.

The SPEC website now hosts a new pesticide information clearinghouse, including fact sheets and info on seminars. And, starting this spring, SPEC will offer workshops for homeowners on safe alternatives to pesticides and safe pesticide disposal.

Anti-pesticide campaigners say that, while public education drove demand for the pesticide laws, the themselves bring on widespread change.

And that's not just because people don't like paying fines. It's about credibility. "This sends a strong message," says Bulic. "It says that the [pesticide] issue is important enough to have legislation.'

MacAdam agrees. "People are inclines to say, "Well, if the government says it's okay, then it's okay."

BULIC NOW SEES that attitude breaking down. "At one time, if one didn't use pesticides, it was considered strange. If you see them now, you have to prove they are safe." And suddenly, he says, the pace has really quickened. "So much has happened in the past 10 days."

But for MacAdam, the pace is still too slow.

"Parents generally are not aware enough about [pesticide dangers]. It's really tough to break down the counter-marketing."

True to her own campaigns, she feels the best place for public educations is in the classroom. "Then the students go home and tell Dad they don't want him to spray weed killers because it's bad for them, and him, and the birds and the bees."