

# TURFGRASS TRENDS

## CHEMICAL RESTRICTIONS

### What's the Future of Perfect Turf?

By Ted Steinberg

This past spring, Quebec passed the most stringent pesticide code in all of North America, pulling more than 200 lawn-care products off the market. More than 70 municipalities in Canada, including Toronto, now have laws regulating the cosmetic use of lawn-care pesticides. Faced with such anti-lawn sentiment, the American Green Industry has banded together to form Project EverGreen to promote the health and other benefits of a good lawn, as well as the benefits of golf courses and other green spaces.

"The gloves are off," explained one Project EverGreen ad that pictured leather gardening gloves sitting on a beautiful green lawn. "Yes, legislation and regulations have been throwing the green industry some rough punches," the ad declares. "And we're about to start fighting back."

The idea of perfect turf — weed-free, super-green, ultra-trim grass — is under fire, making it a good time, as Green Industry leaders and activists brace for battle, to ask some important questions about the rise and potential fall of perfect turf. When and why did the idea of perfect grass rise to dominance across the U.S. landscape? What forces are helping pave the way for its downfall?

**Even Augusta National Golf Club looked shaggy and unkempt as late as 1948.**

Perfect turf is a very recent invention. Although lawns extend far back in American history, at least to the time of Washington and Jefferson, the notion of perfect grass is largely the product of the post-World War II period.

Several forces came together to drive the quest for perfection in turf care. Consider, first, the economic context. By the postwar years, American manufacturers had succeeded in refining mass production to the point where it was possible to produce a large volume of goods both efficiently and cheaply. Who would buy all these products was still an open question.

Ultimately, the idea of planned obsolescence, which first emerged in the 1920s, proved enormously attractive to American business in the postwar period. Perfect lawns, as it turned out, were the on-the-ground equivalent of annual model changes in the automobile industry. Growing non-native grass species to perfection was a high-energy, high-maintenance proposition that sent consumers continually back to the store for more products, helping solve, in part, America's underconsumption problem.

In addition to the economic context, trends in natural resource history also proved very conducive to the idea of perfect turf. In the postwar period, water and oil — the

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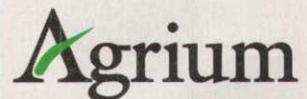
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## QUICK TIP

With spring on the way, take time to prep your irrigation equipment for the new season. Lubricate your pumps; clean and rebuild your pressure relief and pressure regulating valves; have a qualified electrician look at your pump control panel; tighten all wire connections and determine that your contactors and starters are ready for another season. Make sure all electric breakers are not burned or weak, and check and repair any defective 110v/220v power splices in your controllers. Sometimes just a couple of hours doing these simple things will save you headaches when the weather breaks and you need your system.

PHOTO 1



*Turf research continues to develop more disease-resistant cultivars to mitigate the impact of pesticide bans.*

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two major resources necessary for growing perfect grass — were abundant and inexpensive. As late as 1990, even arid Las Vegas still charged a flat fee for water, giving golf courses and other high-volume users a massive subsidy. Meanwhile, despite the oil crises of 1973 and 1979, oil was selling for less than bottled water by the end of the 1980s. Together, this favorable natural resource context combined with economic exigencies to underwrite the movement for perfect turf in the United States.

Organized golf clubs, for example, had existed in the United States since the late 19th century. But these early courses tended to be located on old pastures hardly known for their meticulous upkeep. Greens tended to be cut long, perhaps as much as half an inch or more. Even Augusta National Golf Club looked shaggy and unkempt as late as 1948.

Capitalizing on the inexpensive cost of water, golf courses in the 1960s rushed to install automatic irrigation systems. Automatic irrigation systems used vastly more water than the older method which relied on workers to haul hoses and sprinklers around the course. Sud-

denly, cool-season species like bentgrass — originally found only on greens — were being planted on tees and fairways as well.

By the 1970s, superintendents rescued the Stimpmeter, invented in the 1930s, from obscurity and began reducing mowing height in the quest for faster and more perfect-looking greens. The grass height on greens trended downward from half an inch to as low as an eighth of an inch by the 1990s. The ecological impact of mowing low, meanwhile, increased the demand for both water and pesticides as the rage for perfection and faster greens gripped the golf landscape.

### Pre-emption

Today, however, it seems clear that the perfect turf ideal has entered a vulnerable period in its history. Though the green industry is as eager as it was in the 1950s to move its products by selling golf course superintendents and homeowners more chemical inputs, water and oil are more expensive.

In a move to save on water, the city of Las Vegas in the late 1990s passed a law applicable to new homes that limited turf to 50 percent of

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the front yard. In 2005, increased demand for oil in China combined with the devastation wrought to the Gulf of Mexico by Hurricane Katrina sent the price of oil to \$70 a barrel. The spike in oil prices has made the entire idea of high-energy grass seem like one big ecological conceit.

Perhaps an even more formidable threat to perfect turf can be found in trends in the history of law, specifically the development of the precautionary principle. In the early 1970s, the Germans, dealing with the threat of air pollution, pioneered the idea of *Vorsorgeprinzip*, the first substantive attempt to deal pre-emptively with environmental and health problems based on the weight of scientific evidence but before any conclusive determinations could be made. The precautionary principle was invoked in 1987 at the Second International Conference on the Protection of the North Sea where it was held necessary to protect the waters in the face of chemicals threats “even before a causal link has been established by absolutely clear scientific evidence.” It has since found its way into a number of important international treaties. More important for our concerns here, the principle was articulated in law for the first time in North America in the Supreme Court of Canada’s Hudson decision.

The current trend toward banning pesticides in Canada began more than a decade ago when Hudson, a small town outside of Montreal, passed a law prohibiting the use of pesticides for cosmetic purposes. The political scientist Sarah Pralle has argued that the driving forces behind Canada’s anti-lawn pesticide movement include not simply the embrace of the precautionary principle but clever organizing on the part of activists who have questioned the logic of lawn perfection and the risk that lawn chemicals pose to children’s health.

Opposing these activists were two lawn-care companies, which violated the Hudson ordinance sending the case all the way up to the nation’s Supreme Court, where, in 2001, the law was upheld. “In the context of the precautionary principle’s tenets,” the court ruled, “the Town’s concerns about pesticides fit well under their rubric of preventive action.” Following the ruling, Quebec’s environment minister André

Boisclair declared, “People’s health is more important than the perfect lawn.”

Pre-emption laws on the books in 41 U.S. states prevent local municipalities from following in the direct footsteps of their neighbors to the north. But the forces that have aligned to produce anti-perfect lawn activism in Canada are finding some fertile ground here in the United States as well. For example, the risk of eutrophication spurred the city of Madison, Wis., to ban the use of phosphorus in fertilizer, as did the seven counties that make up the Twin Cities area around Minneapolis and St. Paul. The industry challenged the Madison regulation in court, arguing that Wisconsin’s Pre-emption legislation — which forbids local municipalities from passing their own pesticide ordinances — prohibited the city from applying such a rule to weed-and-feed products. But in late 2005 the 7th U.S. Circuit Court of Appeals upheld the legality of the phosphorus ban.

What, in short, will be the future of perfect turf? It is difficult to say for sure. But in an era of natural resource scarcity and increasing concern about chemical use, it seems likely that more people may be inclined toward the conclusion of former East Hampton, N.Y., town supervisor, Jay Schneiderman, who called for more pesticide regulation after he began fearing that pesticide-contaminated drinking water played a role in the strikingly high number of lymphoma cases found among graduates of a local high school.

“People like their green lawns, but a green lawn should not come at the expense of public health and safety,” he said. “I’d rather see dandelions than leukemia.”

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### QUICK TIP

An excellent transition aid, Revolver® herbicide selectively removes cool-season grasses from warm-season grasses. Use it to control clumpy ryegrass, *Poa annua*, goosegrass and a number of other weeds in bermudagrass greens, teeboxes, collars and approaches surrounding bermudagrass greens, fairways and roughs. Results are generally apparent within one to two weeks.