THE TRUTH RUG REEN

JAY FELDMAN

t was widely advertised in 1992 when TruGreen merged with ChemLawn, the company whose name embodied a business plan with sole dependency on toxic synthetic chemicals. The company moved its trucks with tanks of toxic pesticides and synthetic fertilizers through communities across the country where children and pets play, applying toxic materials like water, exclaiming their safety, and extolling their benefits. ChemLawn took the toxic chemicals that invaded modern agriculture and brought the same model to the home lawn, playing fields, schoolyards, hospital and corporate landscapes, municipal campuses, and rights-of-way.

ChemLawn was founded in 1968 by sod farmers and garden center owners in Ohio, so the orientation toward chemical-intensive practices was a part of the company culture from the beginning. However, the trophy for changing U.S. culture on the lawn aesthetic must be given to another company—Scotts-Miracle-Gro Company.

One hundred years before ChemLawn's founding, in 1868, Orlando McLean Scott started selling seed to local farmers out of his hardware store in Marysville, Ohio. He grew the business by selling seed to homeowners, then added synthetic fertilizers to the mix in 1928, soon after the Haber-Bosch process enabled the economical manufacturing of synthetic nitrogen. No longer did growers of plants have to depend on nature to deliver nitrogen through organic matter and soil biology that cycles nutrients naturally.

By the time Scotts, in 1947, introduced Weed and Feed (a mixture of the herbicides 2,4-D or mecoprop and synthetic fertilizer—nitrogen, phosphate, and potassium), the company was part of a cultural revolution that turned lawns of grass, wildflowers, and clover into monocultures of green carpets, mixing synthetic fertilizers and pesticides to kill weeds before they could germinate and tamp down fungus. Everything needed was put in the bag—Scotts 4-Step program. Scotts became a leader in the societal transformation to take the chemicals used as weapons of World War II and integrate them into consumer pesticides.

The merger of Scotts and Miracle-Gro in 1995 was a joining of cultures that ignored nature by feeding plants soluble synthetic nutrients that undermine ecosystems. It was a logical next step for Scotts to purchase the Ortho chemical business of branded home and garden pesticides in 1999, and proudly entered into an exclusive marketing agreement



to sell consumer Roundup/glyphosate herbicide products. But, before that, Scotts decided to get into the lawn care service business, when in 1998 it began competing with Chem-Lawn. Then there was the merger with TruGreen, only to be followed by Scotts getting out of the service business in 2019. Covering its bases in 1998, Scotts purchased the organics company Earth Gro, Inc. Maybe organics is their future?

There is growing recognition in the industry that the public is moving away from the toxic chemical-intensive business model of ChemLawn, now TruGreen. A local lawn care operator in Ohio, writes in its publication, "Over the past 20 years, noted industry experts have cited reasons for the decline of the ChemLawn/TruGreen brand. One of those is the rising awareness of consumers about the chemicals they put on their lawns. More and more homeowners are opting for more natural solutions, including organic lawn care."

KNOWING TOXIC CHEMICALS USED IN LAWN CARE

Chemicals used in lawncare may cause cancer, neurological and immunological illnesses, respiratory effects, or other health or environmental harms. As a result, lawn care pesticide applications in neighborhoods across the U.S. cause involuntary exposure to chemicals that exacerbate respiratory, neurological, and immunological illness and risk factors associated with Covid-19. For example, for decades Beyond Pesticides has pointed out that pesticides typically used in commercial lawn care cause a range of health and environmental effects, including chemicals such as: (i) the weed killer glyphosate (Roundup), which is identified by the National Toxicology Program and the International Agency for Research on cancer (IARC) of the World Health Organization as probably carcinogenic, (ii) chlorophenoxyacetic acid (MCPA), mecoprop (MCPP), and dicamba (Tri-Power) weedkillers often used in combination or individually, whose label warns of "irreversible eye damage" and "allergic reactions," (iii) trichlorfon (Dylox), an insecticide that is a neurotoxic organophosphate, and (iv) azoxystrobin (Heritage), a fungicide which, along with its degradate, are known to leach into groundwater under certain soil and water depth conditions. (See Beyond Pesticides' 30 Most Commonly Used Pesticides at bp-dc.org/ 30lawncarepesticides.)

ADVANCING ALTERNATIVES

Central to Beyond Pesticides' continuing work is shifting the lawn care industry to organic practices and organic compatible products (see *bp-dc.org/organiccompatible*) —a systems approach that eliminates toxic chemical pesticides and fertilizers, builds soil biology, and operates in sync with nature. This approach is successfully and economically used in managing lawns, parks, and playing fields across the country.

For more information on converting your community to organic land management, please see Beyond Pesticides Lawns and Landscape page at bp-dc.org/lawns. For community-based assistance in converting parks, playing fields, and school property to organic practices, please write Beyond Pesticides at info@beyondpesticides.org or call 202-543-5450.

Beyond Pesticides v. TruGreen: The Settlement

In August, 2020, Beyond Pesticides and TruGreen Limited Partnership ("TruGreen") released the following statement: "Beyond Pesticides and TruGreen Limited Partnership ("TruGreen") today issued the following statement regarding a lawsuit (*bp-dc. org/TruGreencomplaint*) that Beyond Pesticides filed against TruGreen pursuant to the District of Columbia Consumer Protection Procedures Act in the Superior Court of the District of Columbia: The matter has been resolved to the satisfaction of the parties. TruGreen has resolved to modify or remove certain of the marketing statements at issue in the lawsuit.

Beyond Pesticides was represented by Richman Law and Policy, based in Irvington, New York.

SLIME MOLDS



TERRY SHISTAR, PhD

hey move, but they are not animals. They can solve problems, but they have no brain or neurons. They have no mouths, but they communicate with each other. They are not plants or animals or fungi. They are the fascinating, sometimes disgusting, creatures known as slime molds, which comprise several types of eukaryotic (having cells with a nucleus enclosed in a membrane) organisms within the kingdom Protista.

Although many slime molds are microscopic (like many Protists), it is the larger slime molds known as Myxogastrids (Myxomycetes) that are most fascinating. A Myxogastrid is a plasmodium—a large amoeba that can be as much as a meter across and weigh as much as 20 kilograms. Slime molds go through several life stages, but are most recognizable in the plasmodium or "slime" stage.

The plasmodium is a single cell, with multiple nuclei, that feeds by engulfing food and ingesting it through phagocytosis, then digesting it. Fungi, in contrast, release digestive enzymes to the external environment. Slime mold plasmodia often attract attention because of their colors—bright yellow, orange, or pink. The plasmodium can move at a rate of 1mm/hour. It creates spindly, vascular-like growths that connect it to food sources.

NO BRAIN, BUT PROBLEM SOLVERS

Slime molds exhibit intelligence even though they do not have a brain. When divided, they move back together.¹ They solve mazes, learning the shortest route to the food reward,² share information, and can keep track of time. Brian Resnick, senior science reporter for VOX, explains: "If you spread out oats (slime molds' favorite food) on a map, the slime molds will find ways to connect the sources of food with the shortest possible routes. If you add some obstacles to the map, like salt (which the slime mold hate), they'll find creative ways to avoid