Get a Green Lawn the Greener Way.

By Linda Kiscellus Midwest Ecological Landscaping Association (MELA)

Climate change is arguably the most serious issue of our time, and yet property owners/managers are often frustrated by what to do to help. One great answer is to commit to caring for your lawn in an eco-friendly way, by eliminating synthetic fertilizers and pesticides, using push and/or electric mowers where appropriate, and watering and planting responsibly. Every acre of turf managed responsibly captures carbon that would otherwise make global warming worse. The mowing, watering and fertilizing in lawn care contributes approximately 2 percent of the United States' overall fossil fuel consumption. Additionally, lawn care activities account for 10 percent of air pollution, according to the EPA. A reduction in mowing, watering and fertilizing will reduce the levels of greenhouse gases.

So what does it mean to have an organic turf program? It is *not* merely substituting your current 4 or 5 step program with organic or organic based fertilizers. That methodology doesn't work and is the reason some lawn care providers will wrinkle their nose at natural care programs.



A Natural Lawn care program requires a different paradigm, similar to a holistic understanding of health care. It looks beyond the turf to the eco-system as a whole and recognizes that any action in one area is going to send out good or bad ripples to the other areas. The goal is to send out good ripples.

Such a program is founded on this principal: Feed the soil and the soil will feed the plants—including your trees and shrubs and flowers. Healthy soil is teeming with life. "Dirt" is what you track into your house. When soil life is nurtured through the use of natural materials, all plantings thrive. This is called the soil food web.

Now here's the rub: Plants can't directly access nutrients in organic fertilizers. Their components need to be broken down by the life-giving microorganisms in the soil. Soils that have been heavily dosed with synthetic fertilizers and pesticides have lowered microbial life populations. Synthetic fertilizers are designed to feed plants directly and by-pass the soil food web. So if you simply switch from synthetic to organic without building up the soil food web, the results will be disappointing. Similarly, organic fertilizers won't work in situations with soil-less potting media that is primarily peat moss and vermiculite or perlite, such as containers or built planters. Unless soil and sufficient compost was also supplied, there isn't enough "life" in the soil to break down the components into accessible nutrients.

So, a natural turf care program begins with building the soil by adding organic matter, such as compost along with compost teas. Both contain billions and trillions and gazillions of microorganisms that work together in an amazing cycle of life we call "nature". The liquid form is available to the soil more quickly than dry compost, but both are needed for sustained growth.

Here are 10 basic steps, gleaned from *SafeLawns.org* for creating a healthy vibrant lawn that is also healthy for people and healthy for the planet.

Obtain a Soil Test. Never spend money on fertilizers or soil amendments without first consulting the results of a soil test. It's the equivalent to taking drugs, other than Tylenol or aspirin, without consulting a doctor...a potential waste of money that too often leads to chasing symptoms and not looking at causes.

Grow the Right Grass. The most common turf grasses in northern climates, Kentucky bluegrass varieties, also need the most water and fertilizer to grow well. Other species such as perennial ryegrass, fescue and buffalograss may be better suited for certain areas. Lawns with up to 5% dutch white clover can contribute up to 50% of their nitrogen needs. It was common to add clover to seed mixes in the 1950's. The introduction of 2,4-d, a broadleaf herbicide, wiped out clover from lawns.

Water well, not often. Water deeply and infrequently so the roots learn to grow down into the soil to get the water they need. Morning is preferred so that the surface of the turf dries off during the day.

Mow properly. Recycling grass clippings by leaving them on the lawn will provide approximately half of the turf's fertilizer needs once a healthy soil food web has been established. Turf should be cut no shorter than 2.5 inches and kept higher in summer months. A bonus to a natural turf system is that the grass grows more slowly and therefore requires less mowing.

Avoid Synthetic Materials. Fertilizers manufactured in a laboratory often burn lawn grasses and soils. Beware of products called 'organic-based'. Fertilizers and amendments should come from materials that were once living plants or animals or mined minerals such as lime or sulfur.

Add compost. This is Nature's magical soil additive that adds life to the soil. These organisms interact with organic fertilizers to provide the green lawn you covet and naturally keep pest and disease issues in check. **Interesting Fact:** "For every 1% that you increase your soil's organic matter, you increase the water absorption capacity by 16,000 gallons of plant-available water per acre, down to one foot deep" (EPA).

See Weeds as Messengers. First, give up the notion of having a 100% weed-free, disease free turf. It's like telling your doctor you expect to never get sick from now until the day you die. It isn't realistic. Even healthy people get sick—just not as often! Some lawn care providers will argue that they must use pesticides (a term that encompasses herbicides, miticides, insecticides and about 11 other 'cides') to make their clients happy. Canada has passed a ban on the sale of aesthetic pesticides in home and garden use because the potential health risks aren't justified over the fear of a dandelion showing up! If your lawn is mostly weeds, it's because your soil wants to grow weeds and not grass. The sustainable way to manage weeds on the lawn is to change the soil conditions so the soil wants to grow grass. When turf is thick and lush, there isn't room for weeds, but a few will make an appearance. Weeds usually appear only when something is wrong with the soil. Even if you kill the weed, it will come back unless the underlying problem with the soil is addressed. Create a marketing advantage by advertising your property to tenants as a "Pesticide Free" zone—but be ready to walk the talk.

See Insects as Messengers. A rush of new grass growth caused by synthetic fertilizers will often attract insects. Predatory insects are rarely a problem in a natural system that is in balance.

Over-seed regularly. In nature, all plants produce seed to reproduce themselves. In a lawn system, where we mow regularly, grass is not allowed to reproduce and even the healthiest plants get tired. By over-seeding in spring or fall, robust young plants will be introduced that will fill in bare areas and compete aggressively against weeds.

Here are some questions for evaluating a Lawn Care provider:

- 1. Do you offer a Natural, Pesticide-Free Lawn Care Program? If the contractor says 'no' or 'sort of' or generally stammers around the answer, you're better off picking someone else. Some companies will talk about "transitioning" your lawn to organics. If you buy into this approach which involves weaning your lawn off chemicals make sure the plan is realistic and that the weaning process doesn't go on indefinitely. If you don't want any synthetic chemicals used, get this in writing and talk to the contractor about the products he or she plans to use.
- 2. How Will the Contractor's Program Build Your Soil? If your contractor is sold on a natural approach, he'll want to excitedly talk all day about beneficial microorganisms, soil life, fungal content and the role of calcium and compost. If your contractor wants to talk a lot about adding nitrogen, pick a different one. Remember, you are now hiring someone to grow grass—not be a defender against weeds. There is a difference.
- 3. What is the Game Plan, or Lack Thereof? Traditional lawn care companies operate according to a pre-set calendar. Natural lawn care companies operate based on that year's particular climate challenges. Every year is different; it's not likely you will encounter the same conditions two years in a row. Decisions need to be made according to the weather, not blanket applications.

SIDE BAR:

"A Chemical Reaction" is a documentary about the town of Hudson, Ontario who enacted the first prohibition of lawn chemicals in North America. These same chemicals are applied in tens of tons to lawns in the U.S. every year. The producer, Paul Tukey, was the largest lawn care provider in the State of Maine—until he ended up in the hospital with acute chemical sensitivity. To see movie trailer: http://www.safelawns.org/chemical-reaction/

If your organization would like to host a screening of this award-winning movie, please contact: MELA www.melaweb.org or Linda Kiscellus 224-383-2118



BIO:

Linda Kiscellus currently works as the Purchasing Manager at Moore Landscapes, Inc. and is their Chief Sustainability Officer identifying opportunities and providing guidance on sustainable landscape plans. She serves on the board of directors for the Midwest Ecological Landscaping Association, a community of landscape service providers committed to environmentally responsible practices.