



Fertilizer Workgroup - Second Meeting Notes – Landscaping & Grounds

These notes capture, to the best of our ability, the statements made and opinions voiced at this meeting. The purpose of posting these notes is to ensure transparency in the LINAP workgroup process. These notes should not be used as a reference document. The statements in this document are not necessarily supported or endorsed by NYSDEC or LIRPC.

Date: June 20, 2017
Location: Suffolk County Water Authority Education Center in Happaug, NY
Purpose: Review the results of the Fertilizer Workgroup questionnaires; Review initiatives by the landscaping industry to reduce fertilizer nitrogen use.

Attendees: Table with 2 columns: Name, Representing. Lists names and organizations such as Irrigation Association of New York (IANY), Long Island Nursery & Landscape Association (LINLA), etc.

Distribution: All Attendees

❖ Overview of LINAP and Introductions

❖ Industry representatives

- Butch Starkie – representing NSLGA which has about 1,500 member individuals
▪ He farms 86 acres; owns distribution company that sells to wholesale trade; he owns retail garden center; he has been in landscape trade over 40 years
▪ NSLGA members are primarily maintenance landscapers
➤ Carol Isles – representing LINLA, which has about 200 member companies
▪ Her membership predominately nursery at one time, shifted since then



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- Landscape design-build firms and nursery distributors now main members of LINLA
- LINLA also includes some landscape maintenance companies
- George Iannaccone representing IANY -- irrigation companies
- How many other companies are out there that aren't in associations? Don't know...
- Looking to communicate with commercial and homeowner fertilizer application businesses about their practices
- Looking at what existed in the past, exists today and what can be done in the future, both short term and long term
- How many people hire landscapers versus do own lawn care? Don't know, but the number of people hiring professionals is growing. Some may have turf care but do own vegetable garden

❖ Formulations and Application Rates

- Introduction
 - Would like to understand what fertilizer formulations are currently available to the landscape industry, whether available products meet industry needs, and what improvements might be possible
- Turf, trees, and shrubs
 - Should we talk only about turf fertilizer, or do we include fertilizer used for trees and shrubs? Focus is on lawns right now (10-25% of industry is trees, shrubs, vegetable gardens)
 - Non-turf more long-term LINAP / individual subwatershed issue?
 - May be room for industry to address - might be different companies than those treating lawns
- Butch Starkie (representing his firm)
 - His number one selling product is Hollytone - organic, slow release, 4% nitrogen
 - Fertilizing of annuals usually water soluble, low nitrogen, not slow release
 - Soluble fertilizers useful for "spoon feeding" application
 - Golf courses - rarely use granules (he sells to them)
- Nassau and Suffolk laws – timing
 - Had good data to say when plants didn't need fertilizer and that runoff was significant
- NSLGA
 - Many homeowners and some landscapers don't follow the law - great legislation that's never enforced
 - Recommendation that fertilizer sales be limited only to approved application period
 - Believes DEC could more effectively handle enforcement than county health departments
 - Application rate of .7 to 1/lb. /1000 is industry norm
 - Need products with different release times; need product with 6 to 8 week longevity
- What are products out there now – are they sufficient for tailored needs?
 - NSLGA - no one ever called and asked for data - would love to share with LINAP
 - Numerous sources of nitrogen - some quick, some slow release
 - 5-10-5 - strictly for vegetables - no one uses on lawn - all soluble, readily available



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- No residential turf fertilizers available that are all soluble - minimum 30% controlled/slow
- If law timing was enforced – application rate per the label would be 3.75 lbs./1000 sq. ft. per year
- Anything more than .7/.8 lbs./1000 sq. ft. per application is too much
- Cornell BMPs recommend 3 lbs./1000 sq. ft./year
- NJ & MD limit application rates for homeowners & professionals
- People may not know what 1,000 sq. ft. looks like on their lawn
- Landscape trade don't necessarily use whole bag - save leftover for next property
- Do landscapers know how to use fertilizer formulations? How do they know what to use?
 - BMPs - soil should be tested to determine fertilizer needs, if any; good ones do that
 - LINLA & NSLGA members very involved - work with CCE a lot
 - Landscape professionals that are not in associations may be ones that need education
- Have regulations helped fertilizer manufacturers change formulations / bag instructions?
 - Don't make special packaging for different states
- Numbers don't tell it all - need to do calculation and set spreader appropriately
 - Homeowners don't; Professionals do
- Grass clippings
 - TNC – fertilizer need low with atmospheric N deposition and grass clippings left on lawn
 - TNC - for established lawns, Cornell says fertilizer is not needed
 - NSLGA – homeowners not willing to leave clippings on lawn
 - Town of Southampton passed ordinance that no grass clipping can go to transfer station
 - Town of Huntington won't pick up curbside, but can bring to recycling center for a fee
 - Could require different labeling instruction on lawn for those who leave clippings?
 - Suggestion that this is a public education opportunity
- Products available to professionals vs homeowners
 - Some use the same products; Professional options much more varied
 - Box stores have about five different choices
 - Should different formulations be available to professionals than homeowners?
Seems to be exception that homeowners seek out professional fertilizer - may be a long-term LINAP issue
- Basic product types
 - Homogenous - every grain has all three components
 - Blended - different grains representing each component
 - Release mechanisms different
- Optimal industry mix
 - What would optimal industry formulations look like that could be standardized that would reduce over application that results in nitrogen pollution?
 - IANY - everything is available, don't want to see anything removed as the industry needs different mixes for different applications
 - Where is the idea coming from that there are opportunities to improve formulations?



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- Comes down to knowledge
 - Fast acting at light rate better than slow release at very high rate
 - Anyone can buy golf course fertilizer - just more expensive
 - Nothing's an issue if used in the right way
 - Grass plant nitrogen uptake rate is limited – application rate should be keyed to that
 - Retail level - public doesn't have adequate information; people do ask for help
- ❖ **Professional certification and licensing**
- Should fertilizer applicators be licensed?
 - Suffolk County home improvement license requires one 3-hour fertilizer class - given info to select product most environmentally friendly and tools for fertilizer use and turf care. About 700-800 people have gone through course
 - Nassau County does not have that education requirement
 - Training vs carrying out what's learned in training are different things
 - Many in trade don't have proper licensure - don't know how many
 - It is a flaw that there is not a specific license for fertilizer applicators
 - LINLA - states that have licensing also have an incentive for the homeowners to hire them
 - IANY - don't want separate license, but think there should be a way fertilizer course counts towards pesticide license
 - If require fertilizer applicator license, what do you do about homeowners? Give professionals options not available to homeowners?
 - Organic certification
 - Perfect Earth Project - certified 100 landscapers as organic on LI; public awareness campaign for reducing the use of nitrogen fertilizers and pesticides on lawns
 - Northeast Organic Farming Association (NOFA) has a certification & training program
 - NYSDEC has the Be Organic Green Yards program
 - Homeowners
 - Cultural identity on LI for emerald green lawn
 - Conversion process is slow, methodical and very laborious - have to convert homeowner first, landscapers will change when they know there is a customer for these services
- ❖ **Management Measures**
- BMPs for landscape industry
 - Have proposal from Cornell; looking for funding; have endorsement letter and associations that are on board. Contact LINLA for more specifics
- ❖ **Recycled materials**
- Buying and selling kelp and kelp extracts (as soil conditioner, not fertilizer)
 - In UK and other countries use wool left over from sheep shearing industry - high nitrogen and fibrous qualities good for enhancing soil structure - source in US?
 - Many more people asking about organic opportunities



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- Not a lot of organic herbicide options for clover or weeds
- Options for crabgrass, weed control (corn gluten)
- Wastewater solids
 - Milorganite has customer base on Long Island
 - Many formulations have biosolids in them - milorganite is just one of them
 - Reuse wastewater solids on LI? Must be processed properly
- Conflicts with phosphorus law
 - Some products conflict law - would apply to seaweed and other recycled products as well
 - Some states have exceptions for organic products
- Soil amendments from other recycled materials
 - Do landscaping companies use soil amendments?
 - A lot of mulch from construction debris sold on LI. Not used on turf
- ❖ **Native Plants**
 - Sell a lot of native plants - increasing steadily last 6 or 8 years
 - Perhaps driven by bee crash?
 - Some towns require natives in site plans
 - To increase acceptance
 - Must consider urban landscape expectations specific to LI
 - Reach out to landscape architects, town, municipalities, building departments
 - Consider offering more LEED points?
 - Use of natives gaining momentum
 - See Prince George County, MD - low impact development manual - offshoot of LEED
 - Adequate variety being grown? Yes
 - Ancillary to the nitrogen issue unless installed as conservation buffers
 - Reducing the amount of turf
 - Replace turf with native shrubs and trees - less fertilizer needed. May be cultural issue
 - Out east some towns require 75 foot buffers, all natives (specific list). Not fertilizing that area b/c doesn't need it
- ❖ **Stormwater**
 - Why aren't we talking about permeable surfaces? We are, in separate stormwater initiative
 - Should identify priority areas for green infrastructure solutions and municipalities that have stormwater ordinances that could act as a model for others
 - MS4s on LI
 - DEC stormwater design manual available
 - South Shore - support communities doing green infrastructure
 - Sending nitrogen contaminated water to groundwater doesn't solve the problem - make sure BMPs treat nitrogen
 - Artificial wetlands - standing water can be issue



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- SGSB – May use benefit funds to install bioswales with native plants
- PEP - rewards program available to install rain barrel, rain garden, native planting, up to \$500
 - Set aside a lot of money but people find it too daunting
 - Need more info about why alternatives to fertilizer are better for the environment
 - Homeowner could use a landscaper, but because more expensive would do themselves

- ❖ **Data from Stony Brook of Nitrogen Sources**
 - A lot of data from groundwater monitoring wells

- ❖ **Legacy Nitrogen Entering Bays**
 - Potato farms used a lot of soluble N; duck farms
 - Possible solutions: Bioextraction; permeable reactive barriers
 - To some extent have to accept and not make worse

- ❖ **Suggested Next Steps**
 - Include Flower Growers Association in agriculture meetings
 - Need greater public education on need for and impact of very green lawns
 - Landscape associations have data they will share with LINAP