



August 19th, 2020

Re: Ogunquit Pesticide/Herbicide Ordinance

Dear Members of the Ogunquit Conservation Commission,

I am writing to you with two requests. The first is a clarification of the allowable types of fertilizers we may use on lawns. As a result of our conversations during meetings last fall and winter, all Mainely Grass customers are on Organic Only Lawn Care Programs. By nature of the strict definition of "Organic" in our industry, this means a very finite set of fertilization products can be used.

The wording of the Ordinance itself does not prohibit other types of fertilizers (per sections 1102.4 and 1102.5) and the permitted products are "not limited to" products listed by the three identified certification bodies (section 1102.2). Based on the Commission's feedback, however, I understand that the spirit of the ordinance is to limit products strictly to those that are certified Organic, and we are complying with that desire.

Since getting this clarification from the commission and making this change for customers in Ogunquit, we have seen a noticeable degradation in the condition of lawns that we service. Our customers have as well and are left with deteriorating lawn vitality and hardiness. I request the Commission allow synthetic fertilizers in lawn care so we can properly care for turf in Ogunquit.

To support this request, I'd like to emphasize that the use of synthetic fertilizers is in no way synonymous with Pesticide or Herbicide Usage. Fertilizers, whether synthetic or organic, are used to feed plant matter while Pesticides are used to control pests (weeds, insects, etc). In this context, the term Fertilizer is also considered Pesticide-Free. I bring up this distinction because the word "Fertilizer" is only used once in the Ordinance while the term "Pesticide" is used 16 times.

Secondly, I would like to highlight Craig Pawelski and his property 28 Village Green Dr Ogunquit, ME 03907 as a case study in the benefits of the ability to use synthetic fertilizers to maintain a thick, healthy, and hardy turf. Craig is a long-standing customer of Mainely Grass and has agreed to serve as an example for the Commission's consideration. He, like Mainely Grass, is concerned about what the limitations of the ordinance are doing to his lawn, especially considering the time, energy, and investment he has made to date to maintain it.

We have cared for Craig's lawn for years and have had good success keeping his lawn lush and healthy. Exhibit 1 below will show pictures of the lawn in both 2018 and 2019 in great condition. To be clear, Craig is an excellent customer and does his part with proper cultural practices (mowing, watering, etc) to ensure our service has the best possible results. As you can see in Exhibit 2, however, Craig's lawn has struggled immensely in 2020 despite maintaining the same cultural practices. In fact, the only thing that is different in 2020 compared to previous years was the switch to Organic fertilizer.

To get more scientific data about the lawn, Mainely Grass submitted soil samples to a certified 3rd party laboratory to perform a complete soil analysis. The results of that Soil Test are copied below in Exhibit 3. This Soil Test can be read in three parts.

First is the soil's pH (Soil pH and Buffer pH) which determines the fluidity with which nutrients can transfer from the soil to the root zone of the plant. Craig's lawn is incredibly acidic which means whatever nutrients are in the soil are highly "locked up" making it difficult for the turf to take up needed nutrients. Because Organic Fertilizers must be broken down by microorganisms in the soil before they are in a form that can be used by turf, the use of organic fertilizers further exasperates this nutrient lock-up. Synthetic fertilizers, on the other hand, are already in a form that can be utilized by the grass plant, allowing us to better maintain turf health while we correct the pH over time.

The second part (Organic Matter % and CEC) relates to the soil's ability to hold nutrients in the soil profile. The higher the Organic Matter and the CEC ("Cation Exchange Capacity"), the more ability the soil has to retain nutrients for the turf to feed off of. If you think of the soil like a sponge, the Organic Matter and CEC are indicators of how much water the sponge can hold. Deficiencies here are where Organic treatments of various varieties (fertilizers, composts, organic amendments, etc) are most needed. Craig's soil is notably strong in this respect. The results for this section are in the top 20% of the over 2,500 lawns that we have tested throughout New England this year.

The third and final section of the Soil Test all relates to macronutrient saturation--in other words, the presence of key nutrients for turf growth and health. Here it is easier to look at the graph towards the middle of the page where the extreme nutrient deficiencies are most easily visualized. Of particular note is the reading for Potassium ("K"). The three primary components of all fertilizer--organic or synthetic--are Nitrogen (N), Phosphorus (P), and Potassium (K). Potassium's role as a key macronutrient is in aiding the development of cell structure which promotes stress resistance (disease, extreme temperature, drought, etc) and general turf hardiness.

Craig's soil is so deficient in Potassium that it needs 4 pounds of Potassium per 1,000 square feet of turf to get into an optimal range. Organic fertilizers have lower amounts of N-P-K compared to synthetic options and they can't be custom formulated the way that synthetics can. To reach the recommended Potassium levels, Mainely Grass would need to apply 200-400 pounds of organic fertilizer per 1,000 square feet. At those levels, the resulting Nitrogen deposit would be 8-16 pounds per 1,000 square feet, 3-5 times the recommended annual amount of Nitrogen established turf needs.

With synthetic fertilizers, I can reach the same recommended level in just 13-23 pounds of synthetic fertilizer per 1,000 square feet, which would keep annual Nitrogen amounts well within recommended levels as well. For these reasons, I ask the Commission to provide guidance allowing synthetic fertilizers in lawn care. Our goal, like that of the Commission, is to sustain and promote the environment with healthy green spaces that people and pets can enjoy. Synthetic fertilizers are a key tool to help us accomplish that objective.

The second request is to permit the use of a specific Grub Preventative compound known under the trade name Acelepryn (active ingredient *Chlorantraniliprole*). This is a synthetic pesticide, but one that warrants particular consideration.

First, Grubs present the most frequent and common cause of lawn damage. Ogunquit has a waiver process that expressly allows for synthetic pesticides when property damage is a threat, but its use case is limited to curative purposes and on a one-off basis. When it comes to Grubs, the best way to treat them is to prevent them. Doing so requires significantly less product overall and a class of pesticide that comes with considerably fewer potential hazards and cautions. To use Craig's lawn as an example again, his lawn previously suffered a complete loss due to a Grub infestation requiring him to tear out and sod the lawn from scratch at a cost of approximately \$4,000. This is indicative of the kind of damage Grubs can do to a lawn and he fears a return of Grubs will do the same under the confines of the Ordinance, especially in its weakened and more susceptible state.

Acelepryn is a formulation that stands out as unique in pest control. It is the only synthetic pesticide for commercial use that I am aware of that does not carry a "signal word", indicating very low toxicity to people and domestic animals. In fact, the product label for Acelepryn carries extremely similar wording (including precautionary statements) as organic alternatives, but with broader and more consistent effectiveness and is significantly less costly.

As an indication of the safety and efficacy of Acelepryn, it is used by the California Department of Food and Agriculture (CDFA) to control invasive pests such as the Japanese beetle (Grubs are the juvenile form of the Beetle) when treating turf and groundcover. California is widely considered to be one of the most conservative states in the U.S. when it comes to pesticide regulation. A full Fact Sheet on Acelepryn written by the California Office of Environmental Health Hazard Assessment (OEHHA) and the California State EPA (CalEPA) can be found here:

<https://www.cdfa.ca.gov/plant/factsheets/Acelepryn-QA.pdf>, but I will copy their response to the prompt "What are Acelepryn's human health effects?" below (emphasis mine):

*Chlorantraniliprole [the active ingredient in Acelepryn] is classified by the US Environmental Protection Agency as a "Reduced Risk" pesticide when used on crops such as apples, lettuce, peaches, pears, tomatoes and turf. **This means that chlorantraniliprole poses less risk to human health and the environment than other pesticides allowed for the same uses.** While the US EPA classification officially pertains only to commercially grown crops and turf, **the Office of Environmental Health Hazard Assessment believes that chlorantraniliprole poses less risks than other pesticides that CDFA could use to control invasive pests.***

The CDFA has every product available to it to treat for grubs, including organic options, yet they use Acelepryn because of its efficacy and safety. Acelepryn is a synthetic pesticide, but one that is unique in its class and one that I believe still meets the intent of the ordinance while addressing the health and protection of Ogunquit property.

Thank you for your time and consideration. If you have any questions, I would be happy to address them with the Commission at your convenience.

Best,  
Palmer Higgins  
CEO, Mainely Grass

**Exhibit 1: Before Pictures at 28 Village Green Dr  
Ogunquit, ME 03907**

***Front yard, May 2018***



*Front yard, October 2019*



*Back yard, October 2019*



**Exhibit 2: After Pictures at 28 Village Green Dr  
Ogunquit, ME 03907**

***Back yard, July 2020***



**Back yard #2, July 2020**



**Back yard #3, July 2020**



*Turf Degradation Close up, July 2020*



***Thinning Turf, July 2020***



### Exhibit 3: Soil Test Results for 28 Village Green Dr Ogunquit, ME 03907

#### Turf and Ornamental Soil Analysis Report

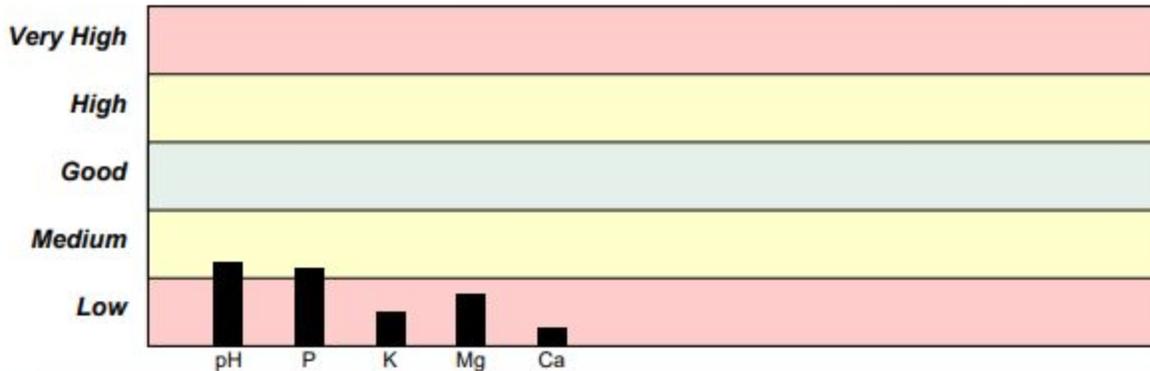


**MAINLY GRASS**  
32 NIMBLE RD  
NEWINGTON, NH 03801

Prepared For
210554 CLERMONT MARC & CRAIG 28 VILLAGE GREEN DR OGUNQUIT, ME 3907

Sample Information			
Sample	210554	Sampled	06-26-2020
Lab Number	A23704	Tested	07-01-2020

Analysis	Result	Optimal	Analysis	Result	Optimal
Soil pH	5.4	6.0-6.8			
Buffer pH	6.0				
Organic Matter	% 4.3				
CEC	13.6				
K Saturation	% 0.7	2.0-4.0			
Mg Saturation	% 3.9	10-20			
Ca Saturation	% 7.3	50-70			
K/Mg Ratio	0.6				
Ca/Mg Ratio	3.6				
Phosphorus	m3-ppm 26	50-70			
Potassium	m3-ppm 42	170-260			
Magnesium	m3-ppm 73	220-370			
Calcium	m3-ppm 264	1800-2500			



Recommendations		Nutrients expressed in broadcast lbs/1000 sqft, except Fe (foliar) and Mn (row)										
Yr	Crop	CaCO3	N	P2O5	K2O	Mg	S	B	Cu	Fe	Mn	Zn
20	Established Lawn, Cool Season	104D	4.0	2.7	4.0	0.5						

*Lime expressed in 100% pure CaCO3. Adjust accordingly. D=Dolomitic. C=Calcitic.*

**Established Lawn, Cool Season:** Where controlled release N is not used, split N application into whatever number works best for your program/climate area. Monitor and adjust nutrient program with annual tissue analysis.