

October 18, 2019

Peggy MacLeod

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Dear committee:

Since I will be out of state for the weekend, I am submitting written testimony to the Pesticide Reduction Committee in case I cannot attend the hearing on Monday.

Thank you for having the public input hearing. I want to make comments on two classes of pesticides. I am not trained as a scientist but have learned from experts who collaborate with our organization to help pollinators.

### **Neonicotinoids**

- Neonics such as imidacloprid are systemic pesticides used by plant/bush/tree/crop growers to reduce/kill pests to make "perfect looking plants"; seeds and soils are also treated and then carry the poison to all parts of the plant, and can stay in the soil/plant for several years.
- These pesticides concern scientists and bird lovers because
  - Pollinator populations are in sharp decline partly due to widespread use of pesticides. IF THIS DECLINE WERE A BANK IT WOULD HAVE BEEN SAVED BY NOW (Quote from recent Recorder article)
  - pollinators that forage on plants with neonics in their leaves, flowers or seeds can become disoriented, have trouble reproducing, or die over a few days.
  - Caterpillars eating treated plants (leaves) will be poisoned and carry that poison to baby birds that need caterpillars in their youth. Bird populations are also in sharp decline. The literature is out there that supports these facts
  - Biodiversity is as serious, or some like the World Bank have said more serious than the climate crisis.
- There are 350+ native bee species in Massachusetts, most of them pollinators; since we depend upon pollination we should all be alarmed about usage in our town and state
- Consumers don't know these pesticides are harmful as well as ubiquitous, so can't guard against them
- A number of garden centers do not label plants that are "Clean" or that have been treated, in order to alert buyers of danger. Some garden centers when asked don't know if their growers use them.
- Stricter regs for neonicotinoids are supported by most environmental and health organizations as well as Valley beekeepers. Legislation restricting usage is before the legislature - Mass. Pollinator Protection Act - which 80% of State Representatives Support. Connecticut and Maryland have banned the use of neonics as has the European Union.
  - (HD.3339) limits the sale and use of neonics to licensed (and trained) pesticide applicators, which would take these pesticides out of the hands of consumers.
  - Sen. Eldridge's Neonic Ban (SD.1366) places an outright ban on the sale, distribution or use this class of pollinator-killing pesticides across the Commonwealth!

RECOMMENDATION: Although by law a Massachusetts municipality cannot pass a more stringent local ordinance than any state regulations for pesticides. I recommend that the City

pass an ordinance or resolution in which the City commits

- to not use neonicotinoids for any reason on municipally owned land; do not purchase/use any treated plants/seeds/soil for any municipal purpose
- to educate town departments and the public about the resolution and warnings against using treated plants/seeds/soil (again cannot ban)
- to encourage property owners, residents, and business owners to adopt pollinator-friendly best practices,
- to direct the Ag Commission to find out where farmers are using neonics within or close to our borders, as drift through spraying can also harm pollinators

My organization, Western Mass Pollinator Networks, an all-volunteer non-profit started in 2016, can provide wording for a city resolution with these main provisions. Since 2017, 10 municipalities have passed similar resolutions thus far. *Copy of Williamstown resolution attached.*

### **Round-up and other glyphosates**

There are so many differing opinions around the use of Round-up - I have heard "experts" on a panel site both pros and cons of using it to eradicate invasive species...including Tom Lautzenheiser from Mass Audubon, and professionals that do restoration projects. And that's frustrating. Yet there are numerous health warnings about the effect of glyphosate on a number of species - not just humans...I hope you have looked at those completely.

We do not want invasive species like Japanese knot weed growing rampant, as they replace native plants that our pollinators co-evolved with. Etc. Etc. But do we have a City / or regional plan to even try to eradicate it before it takes over a lot of our green spaces much like it did in England and Wales?

Some strategies I haven't heard yet spoken

1. The first would be in character for Northampton's sustainability framework, which is to get a public/private/resident squad working together to map out where there are smaller knotweed growths, and then develop a plan for residents and the city alike to eradicate it as much as possible. The plan must include educational events (perhaps neighborhood based) and flyers and an urgency behind it.
2. Shouldn't we have some random spot lab testing of residents to see how much is in our bloodstream? Including members of the committee and City Council members (anonymous reporting). Some of the literature suggests it is in almost everyone's blood stream...
3. Provide information to consumers on how to test for glyphosate and any information available about reducing it or lessening the affects (i.e. taking probiotics?).
4. Urge local stores that have glyphosate products on the shelf to take them off the shelf and why!! Chances are people that aren't trained will use way too much, thus increasing it in our ecosystems.

Thank you for this opportunity



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Williamstown  
Pollinat...017.pdf

**PETITION FOR WARRANT ARTICLE**

*We, the undersigned, qualified voters of the Town of Williamstown, request that the article appearing below be placed in the warrant for the annual town meeting of May 16, 2017.*

**Resolution Declaring Williamstown to be a Pollinator-Friendly Community**

*The purpose of this advisory, non-binding resolution is to encourage awareness, education, and voluntary action in support of pollinators. Bees, butterflies, and other pollinators are vital parts of our ecosystem, provide essential services for valued crops, and thus contribute to our local agricultural economy.*

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*Whereas, bees and other pollinators are an essential component of a healthy ecosystem and a vital link in our food system, providing pollination to grow vegetables, herbs, and fruits;*

*Whereas, locally grown crops such as apples, blueberries, strawberries, squash, and tomatoes depend on pollinators and thus are at risk; and*

*Whereas, pollinator populations are in sharp decline due to human land use practices that are causing ongoing habitat loss and fragmentation, the expansion of pesticide use by consumers and professionals, and the spread of pathogens and parasites; and*

*Whereas, extensive research has documented that neonicotinoids and other systemic pesticides have been correlated with illness and death to bees, butterflies, moths, and other beneficial pollinators; and*

*Whereas, guidelines for Integrated Pest Management practices are available which allow residents, businesses, farms, and towns to manage their land in ways that dramatically increase pollinator forage and nest sites while decreasing maintenance costs; and*

*Whereas, the monetary and social costs of maintaining pollinator-friendly landscapes can be less expensive than costs associated with maintaining chemically-treated mono-crop landscapes;*

*Now, Therefore, Be It Resolved* by the Town Meeting of the Town of Williamstown that the Town of Williamstown is hereby declared a Pollinator-Friendly Community and that the town encourages the adoption of policies and practices that support pollinator health by minimizing the use and sale of pesticides and encouraging property owners, residents, town departments, and business owners to adopt pollinator-friendly best practices including:

- \* Delaying the mowing of fields to allow fall-blooming asters and goldenrods to bloom to provide an important food resource for pollinators getting ready to over-winter.*
- \* Avoiding the planting of flowering plants which are treated with systemic insecticides and avoiding the use of seeds coated with systemic neonicotinoids.*
- \* Planting diverse grass mixes for lawns that include low flowering ground covers such as clover while welcoming the presence of naturally occurring, low-growing wildflowers.*

\* Reducing lawn mowing schedules so as to allow these flowering ground covers to bloom to provide an important food resource for pollinators throughout the seasons and to reduce overall maintenance costs.

\* Avoiding homeowner applications of pesticides that require a neighbor notification flag by the state of Massachusetts about the risks to children and animals, and avoiding non-agricultural homeowner usage of glyphosate products (e.g. RoundUp).

\* Where possible, replacing portions of grassed areas with low maintenance flowering perennial shrubs, wildflower corridors, and trees.

\* Allowing fallen leaves to remain along property borders under trees and shrubs as overwintering sites for insects (and birds).

The Town Clerk is requested to send copies of this resolution to Governor Charlie Baker, Massachusetts Department of Agricultural Resources Commissioner John Lebeaux, State Senator Adam Hinds, and State Representative Gailanne Cariddi, or to take any other action relative thereto.

Signature	Street Address, where registered
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October 18, 2019

Bob Zimmerman, President, Broad Brook Coalition

## **Control of Invasive Plants at the Fitzgerald Lake Conservation Area (Adapted from Essay published in Broad Brook Coalition Newsletter in Fall 2014)**

**Bob Zimmermann, President, Broad Brook Coalition**

Non-native plants can invade almost any habitat: fields, forests, pastures, marshes and lakes are all susceptible to infestation by these invaders. A number of different invasive plant species--typically intentional or unintentional imports from Europe or Asia-- can be found within the Fitzgerald Lake Conservation Area and BBC has devoted much time and effort to control or even eradicate them over the past several years. Some of these invasives occur in small patches while others have the potential to spread widely within a given type of habitat. With patience and persistence, the battle can eventually be won. Yet, even after substantial suppression is achieved, year-to-year vigilance is needed to prevent the few survivors from once again overwhelming their adopted habitats.

Why should we care if invasive, non-native plants grow to dominate a particular habitat? One good reason is that by dint of early flowering, the absence of natural predators, and abundant seed production, invasive plants can often out-compete native plants, turning a diverse suite of natives that thrive in a particular habitat into a non-native monoculture where only the invaders survive. All of us have seen roadside marshes that have been completely overtaken by purple loosestrife. Beautiful to look at, yes, but deadly for the native plants that once dominated these same marshes. The loss of biodiversity leads to a second important reason for controlling invasive plants. Many animals, whether fish, small mammals or birds depend upon the leaves, seeds, stems and other sources of nutrients provided by native plants. These interdependencies, which have evolved over millennia, cannot be sustained once non-native plants take over: animal populations decline and biodiversity once again takes a hit.

**Non-herbicide Approaches.** There are many methods that can be used to control or even eradicate native plants: hand-pulling, mowing, burning, herbicide treatment and biocontrol, i.e., the introduction of specific plant predators. At the FLCA, we have been successful in reducing, by hand-pulling, infestations of garlic mustard, multiflora rose, lesser celandine and goutweed in and around the North Farms Road entrance. In the past three years, volunteers have spent a total of 350 hours hand-pulling the aquatic invasive, water chestnut, from Fitzgerald Lake. For other invasive plants, such as *Phragmites*, glossy buckthorn and spotted knapweed, hand-pulling or digging is not an option owing to their abundance and wide distribution. Mowing and burning are either ineffective or impractical in the FLCA, and the number of invasive plants susceptible to biocontrol is extremely small because the required agents--usually insect predators from the invasive plant's native habitat in Europe or Asia--must be exhaustively tested to ensure their host-specificity and ability to survive when transplanted to a new environment on a new continent.

**Use of Herbicides Where Warranted.** Because of the limitations of other techniques, we have turned to herbicides as the only practicable alternative for controlling certain

invasive plants. No one, of course, wants to see acres and acres of fields and forests sprayed with herbicides as many of these agents kill a wide variety of plants, native and non-native alike. The key to their successful use is specific targeting, where the herbicide is applied to the intended invasive plants in a highly specific manner. For instance, we have found that the herbicide triclopyr, the active ingredient of Garlon 3A and Vastlan, to be highly effective against glossy buckthorn and spotted knapweed in Cooke's Pasture yet has very low toxicity for mammals, birds, fish and aquatic invertebrates. Furthermore, when selectively applied by low-volume spraying, there has been no noticeable "collateral damage" to grasses or other native plants nearby.

In addition, several dense stands of *Phragmites* (common reed) in the Broad Brook marsh have been effectively treated with Rodeo, a formulation of the broad-spectrum herbicide glyphosate that is approved by the EPA for use in aquatic environments. While the herbicide was applied to dense, monotypic portions at the interior of the stands by low-volume spraying, plants around the periphery were hand-injected with the herbicide so as not to affect surrounding native species. From an environmental point of view, the results have been reassuring: *Phragmites* has been virtually eliminated from the targeted sites and replaced by cattails, and over three dozen native plant species (!) have been observed in the treated areas at lower abundance. Moreover, water samples taken at the time of herbicide application showed that the release of glyphosate into the Broad Brook was negligible (<10 parts per billion).

Concerns about the toxicity of agents such as glyphosate have been taken very seriously by scientists as well as those involved in their use. A large number of studies indicate that glyphosate has low toxicity for mammals and birds and only moderate toxicity for some fish when exposed to concentrations many times those used in the FLCA]. Moreover, the environmental mobility of glyphosate is very low because it strongly binds to soil particles, especially those rich in clay; in water, it is rapidly removed through adsorption to suspended and bottom sediments. Eventually, glyphosate is degraded to non-toxic products by bacteria and other micro-organisms. On the basis of these findings, we have concluded that the use of glyphosate poses no significant environmental risks.

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In 2015, however, the International Agency for Research on Cancer (IARC), a WHO affiliate, classified glyphosate as a probable human carcinogen, linking it to the occurrence of non-Hodgkin's lymphoma. The IARC study was subsequently questioned by an extensive statistical analysis carried out by the National Institutes of Health and others, published in 2018, which found "no association...between glyphosate and any solid tumors or lymphoid malignancies." It is clear that the latter did not end the debate as the carcinogenicity of glyphosate remains a matter of heated controversy. Ultimately, we look forward to the development of highly selective biological predators for invasive plants such as *Phragmites*, as well as for new invaders like Japanese stilt grass and mile-a-minute vine which are expanding their range northward and are already encroaching upon fields and forests in Massachusetts.

October 20, 2019

Laura Friedland-Kays

Statement of Concern Regarding the Spraying of Round-Up on the Sylvester Lot

I am a citizen of the city of Northampton, and I live with my family across the street from the seven-acre plot on Sylvester Road that the city rents to the Parsons family, who reside in Westhampton. When I moved into this home 14 years ago, the field was used to grow hay. However, the crop was switched to GMO corn some years ago, and the land has been used to grow GMO corn since that time. On a yearly basis, Round-Up has been sprayed to grow this crop.

There are many serious concerns about Round-Up, both due to its main ingredient, glyphosate, and due to the effects of the ingredients that are listed as inert. The word "inert" only means that those ingredients don't directly kill the weeds--however, it does not mean that those ingredient have no harmful effects.

A series of scholarly articles entitled "Glyphosate, pathways to modern diseases" (Samsel A and Seneff S) gives an overview of many serious concerns about the health effects of Round-Up. There are many other sources that raise substantial concerns as well.

In addition to many issues that this series of scholarly articles addresses, the authors point out that one reason Glyphosate is perceived to be not harmful to humans is because glyphosate kills weeds by disabling the shikimate pathway in plants, and animals don't have this metabolic pathway--they get their amino acids through their diet instead. Therefore, people assume that glyphosate cannot affect us. However, the gut bacteria that enable so many of our functions--including metabolizing the very amino acids that we get through our diet--do have shikimate pathways that can be disrupted by glyphosate, causing us significant health consequences. Furthermore, many of the studies that have been done focus on glyphosate alone, and not on all the additional ingredients that comprise Round-Up, which can also cause significant health concerns, and which wind up in the soil and the water nearby. I include these points not to serve as the entirety of concerns about Round-Up, but instead to address some of the limitations in concluding that it is not harmful.

I understand that the city of Northampton has a responsibility to preserve the land in question as farmland, and that established tenants are the most reliable means to keep the land from getting overgrown. I also understand that the city has a longstanding relationship with the Parsons, and that city officials care about the Parsons' economic needs, who depend on this land to feed their cows. However, I do not feel that the needs of even established land tenants should summarily override the health concerns of citizens of Northampton. There needs to be a discussion that takes seriously the health implications of living near the spray zone. I do not want to be dismissed as a "hobby lobbyist", as if taking action to protect my health and the health of my children and my neighbors were merely entertainment. I am a mother, and I care about a healthy environment for my child and for others.

I also need to point out that the fields in question are home to peeper frogs. There have been some years where I have heard the peepers loud and clear, and then some time after the spraying I've noticed that I don't hear the frogs anymore. I am not saying that correlation necessarily means causation, but I feel we should be sensitive to the ecology particularly for species that rely on wetlands.

I would like to ask how we could go about exploring these issues in a way that is respectful of everyone's needs. I appreciate that after some discussion, in the past Henry Parson agreed to notify me before he sprays, and that this communication has been continued by his daughter. (This is an improvement to the earlier years of spraying--I do remember one morning I was out for a walk with my daughter when she was quite young, and I noticed something happening in the field--in my ignorance at that time I thought it would be interesting to show her the farming machinery in the field, so we stood there looking at the fields being sprayed. Now I have the knowledge and the forewarning to avoid the area while spraying is happening. This notification should extend to other neighbors, perhaps via a group email, and should also include signage that could alert pedestrians, runners, and cyclists that frequent this road that spraying is about to occur.) I also appreciate the discussion that Henry Parson's son, son's wife, and daughter had with me in my home some years ago.

So in conclusion, I am adding my voice to the voices of concerned neighbors. I am unhappy and disquieted with the spraying that occurs, and would like to explore alternatives. I feel that this field, though managed by city officials, ultimately belongs to the people of Northampton. City officials of Northampton should not use their positions to favor the present land tenants to the exclusion of the needs and concerns of residents, and officials should be transparent in their actions. Round-Up has been linked to serious health concerns, I hope that we can find a way to balance the two very important needs at play here--a healthy, safe environment on one hand, and livelihood on the other--and engage in a discussion that takes both into account. Glyphosate has been banned or restricted in a great number of countries due to revelations about its potential harm. I would hope that we can respect each other's needs and perspectives and discuss this with all the good faith, respect, and seriousness the topic deserves.

Sincerely,

Laura Friedland-Kays

October 20, 2019

Ashley Schaffer

To the Northampton Select Committee on Pesticide Reduction:

I am writing to you as a community member who has town-owned agricultural fields in front of my house. My house is embedded in the Mineral Hills Conservation Area trailhead on Sylvester Road. I currently and have always had a good and obliging relationship with the Parsons who farm the field in front of my property.

I take issue with the use of glyphosate to farm this field which is so close to residential homes and conservation land. I take issue with glyphosate use at all, but for this statement I would highly recommend this Committee consider a ban of glyphosate on all town land.

I'm sure this Committee is aware of all the studies done on glyphosate, the gradual damage it causes to soil, water, air, wildlife, and human bodies. All the places where there are bans on glyphosate already. That there are over 13,000 pending lawsuits alleging glyphosate has caused cancer. That products have hit the market labeled "glyphosate-free" to let consumers know they are safe.

Northampton is a Right to Farm town, and I mostly agree with this ordinance. Of course, I have no problem with farmers doing their jobs. We need them. I get this. I come from a family of farmers. This is not an us vs. them complaint as some would try to make it out to be. I'm trying to care for my family and my environment—just like every farmer in our town. Wayne Feiden has said that his office and the Agricultural Commission want "to do all that they can to hold onto their existing farmers." I agree. Northampton should want to embrace its current farmers and welcome new ones. But Northampton is a forward-thinking town. Hanging onto Northampton's farmers should not mean that a known carcinogen is allowed on public land just because that's considered "normal farming practices."

I understand this is not a cut and dry situation. I still firmly believe that Northampton should work for the health and well-being of all its community members. I firmly believe there's a way for farmers to thrive and for the families around the farm fields to thrive as well.

If there is anything that I can do to be of service to this Committee, please contact me.

Respectfully submitted,

Ashley Schaffer  
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Northampton