

## **HERBICIDE AND PESTICIDE STUDY COMMITTEE (HAPSC) GLYPHOSATE USE POLICY RECOMMENDATIONS**

### **Introduction**

This report and recommendation culminate the work of the Herbicide and Pesticide Study Committee (HAPSC) established by the Town of Granby Board of Selectmen (BOS). The purpose of the committee was to review the usage of glyphosate-based products by the Granby Public Works Department on roadways as a means of controlling vegetation near guardrails and skid rails, often located near waterways, and to make a recommendation to the BOS on best practice measures for future roadway vegetation control.

Based on our findings the HAPSC recommends that the Town of Granby discontinue the use of glyphosate for health and environmental reasons. The HAPSC offers these reasons for our recommendation:

- Scientific studies about long-term effects of glyphosate on human health are not clear, with studies and opinions varying from claims of “no statistically significant association with cancer” to “probable carcinogenic to humans,” including potential links to serious conditions such as non-Hodgkin lymphoma.
- Flora and fauna are affected directly and indirectly by glyphosate use, which can affect entire ecosystems. Herbicide use may result in a decrease in native species and an increase in more tenacious invasive species that take advantage of cleared space.
- Optimum vegetation control is not achieved with indiscriminate use of herbicides and attention must be taken to minimize harm to non-targeted species.
- Use of glyphosate near guardrails increases possible contamination of waterways as many guardrails are near streams and wetlands.
- Granby’s prides itself on its rural character and environmental stewardship and those values run counter to aggressive herbicide use.
- Any possible cost savings with herbicide spraying as opposed to traditional mechanical cutting are not significant enough to warrant possible long-term health and environmental issues.

### **Findings**

The Board of Selectmen provided the HAPSC with an eight point charge which included:

1. Gathering information from private, local, regional, and state organizations to examine potential health hazards
2. Obtaining input from various town agencies and town departments
3. Gathering input from the public at large through a public information forum
4. Identifying alternatives and solutions associated with either modifying or eliminating the use of glyphosate

The HAPSC interviewed the Granby Public Works department head, Kirk Severance, to gather facts on the conditions that led to the use of glyphosate and the extent to which it was used in town. The Town's CT DEEP licensed applicator followed the CT DEEP guidelines. The herbicide was applied using a boom sprayer in a 5-foot swath to some 22,000 feet of roadway around guardrails and skid rails. These are areas that are not easily accessible to mowers and would normally be controlled with string trimmers or left to grow wild. A hand wand was reportedly used around waterways to prevent overspray from being sprayed into the water. The product used was Lesco Prosecutor at a rate of 2 2/3 ounces per gallon of water with a total of 6.75 gallons used.

The HAPSC also hosted a public forum on March 14, 2018 to collect opinions and thoughts from the public at large. Approximately 20–25 Granby residents attended the meeting. Eleven people commented all of which were opposed to the use of glyphosate products by the town. Commenters predominantly cited health concerns, water and soil quality, and appearances as the major issues that compelled them to speak out against usage of glyphosate.

The HAPSC members have reviewed materials from a multitude of sources in the execution of this study. Consistent with the charge, the committee members have done extensive searches for information on the Internet from sources such as the Environmental Protection Agency (EPA), CT Department of Energy and Environment Protection (DEEP), National Cancer Institute (NCI), International Agency for Research on Cancer (IARC), and various conservation groups. The committee members have spoken to representatives of these and other groups to gain an understanding of their position and perspectives on the use of glyphosate. Several committee members attended or watched recordings of the Soil, Plant and Human Health Effects of Glyphosate Symposium sponsored by The Institute of Sustainable Nutrition at Holcomb Farm on March 24, 2018.

In general, the HAPSC found that there are a variety of opinions on the safety of glyphosate-based products. Usage of glyphosate has increased significantly over the past 20 years. Many of the manufacturer's claims have been challenged successfully over the many years that it has been on the market, with many lawsuits levied against inventor Monsanto and its licensees. Similarly, studies and opinions as to the impact on the environment, animal, and aquatic life vary from minor to major impacts. Glyphosate is, however, an approved herbicide by the EPA and CT DEEP.

The HAPSC also worked to identify viable alternatives that would consider effectiveness and safety of town citizens and employees. Use of manual cutting methods such as mowers and trimmers seemed to be the most viable at this point in time. A number of natural product solutions that could be sprayed were discussed with the most promising products acetic acid (vinegar) based. These products, however, are not without potential issues either. They all have specific conditions under which they are most effective, are more expensive than glyphosate, and tend to "top kill" rather than kill weeds systemically down to the root. They also have potential health and safety issues associated with the much higher concentrations of acetic acid than found in household vinegar.

## **Actions**

The HAPSC requests the following actions as part of our recommendation:

1. The Town will adopt an environmentally responsible herbicide use policy as a part of the Town's Integrated Pest Management (IPM) approach.
2. The Town will develop a companion Best Practices manual for vegetation control based on expert sources such as universities, neighboring state departments of natural resources or environment, and conservation/stewardship organizations in our climate zone.
3. The Town will discontinue the use of glyphosate.
4. The DPW will continue to use mechanical cutting methods for roadside vegetation control.
5. The DPW will test acetic acid herbicide alternatives during the growing season of 2018 and provide the Town Manager with a report including which products will be used in 2019. The DPW report will show results of specific product use on named plant species, noting date applied, amount used, and whether it was used in conjunction with mechanical cutting.
6. The HASPC would also ask the Town to remind residents to always follow manufacturers' guidelines when using herbicides, pesticides, and lawn care products on their own property.

## **Conclusion**

Granby has the opportunity to be the first in the Farmington Valley to discontinue using glyphosate and be a model for our neighbors to join us in improving our role as responsible environmental stewards. The HAPSC is grateful to the BOS for responding to residents' concerns over widespread glyphosate use with the creation of this committee and we are optimistic that these recommendations are achievable and will provide the Town with environmentally responsible policy.

## **APPENDIX 1**

The following Connecticut towns have either discontinued or restricted the use of glyphosate.

Bethel

Branford

Cheshire

Durham

Essex

Greenwich

Manchester

Plainville

Roxbury

Waterbury

Woodbridge

## APPENDIX 2

The following acetic acid (vinegar) products are considered safer options to replace glyphosate. This list may include products not on the CT DEEP list of registered pesticides.

**Burn-out** (St. Gabriel Laboratories)

25% acetic acid

**Grotek Elimaweed Weed And Grass Killer** (GREENSTAR PLANT PRODUCTS)

7.15% acetic acid

**Maestro Gro's Organic Vinegar** (Ag Organics/Nature's Wisdom)

20% acetic acid

**Vinagreen Natural Non Selective Herbicide** (CMC Chemical)

20% acetic acid

**Weed Pharm Fast Acting Weed And Grass Killer** (PharmSolutions)

20% acetic acid

### COMBINATION PRODUCTS

**Alldown** (BioLynceus Biological Solutions) OMRI organic listed

23% acetic acid, 14% citric acid

**Alldown Green Chemistry Herbicide** (SummerSet Products) OMRI listed organic

5% citric acid, 0.2% garlic, acetic acid, yucca extracts, water

**Bioganic Safety Brands Weed & Grass Killer** (Bioganic Safety Brands, Inc.)

10% acetic acid, 2% eugenol (clove oil), 2% thyme oil, 1% sodium lauryl sulfate

**Black Jack Twenty-one** (Maestro-Gro)

21% acetic acid, yucca extract, olive oil, garlic oil, citrus oil, molasses used as sticking, wetting, and emulsifying agents

**Bradfield Natural Horticultural Vinegar** (Bradfield Organics) NOT OMRI Listed

20% acetic acid, yucca extract

**Burn Out II Weed and Grass Killer** (St. Gabriel Labs) OMRI® listed

RTU 4% clove oil, 3% sodium laurel sulfate, vinegar, lecithin, citric acid

**Burn Out II Weed and Grass Killer Concentrate** (St. Gabriel Labs)

12% clove oil, 8% sodium laurel sulfate, vinegar, lecithin, citric acid

**Natural Weed Control** (Nature's Wisdom/Ag Organics)

0.2% citric acid, 8% acetic acid, water

**Soil Mender 10% Vinegar**

10% acetic acid (made from grain alcohol and not from glacial acetic acid), orange oil, molasses, and a natural surfactant

**Summerset Alldown® Organic Herbicide**

23% acetic acid, 14% citric acid, 0.02% garlic juice extract