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The Joint Standing Committee on Agriculture, Conservation and Forestry Testimony in Support Of

LD 125 An Act To Prohibit the Aerial Spraying of Glyphosate and Other Synthetic Herbicides for the Purpose of Silviculture

Chairman Dill, Chairwoman O'Neil, and Honorable Committee Members, I want to thank you for the opportunity to offer testimony in support of LD 125 An Act To Prohibit Aerial Spraying of Glyphosate and Other Synthetic Herbicides for the Purpose of Silviculture. My name is Jacquelyn Elliott and I live in Waterboro, Maine retiring from New Hampshire with my husband in 2010. New Hampshire is where I was born and lived most of my life. I have spent nearly three decades as an environmental health advocate and activist. As I became educated about the environmental connections to the autoimmune disease, endometriosis, a disease I have lived with for nearly seventy years, I learned that endometriosis is only one of many diseases and disruptions that can be traced to exposures to manufactured toxins. What I have also learned is that the choices made in the past, in many instances, have resulted in dynamic negative outcomes. We have approached what we consider progress mostly without precaution and have, after the fact, come to recognize that what we have done has been oftentimes lethal. An example we can all recall, is the indiscriminate use of DDT.

This is a model that should inform our decisions going forward. One of the chilling aspects about these choices, is that the impacts are not always immediately apparent and are frequently long-lived. Oftentime's synthetic chemicals build up in our lands, waters, and wildlife; our food supply and our bodies. They are compounds that degrade slowly and are very difficult to remediate even if possible. There is some research questioning the use of glyphosate for forest management as it may negatively disrupt the biological ecology of the forest as well as other harmful impacts.

Glyphosate Use and Maine Forests:

I have spent some time acquainting myself with the issue of glyphosate use in Maine's forests as it has appeared previously before The Committee. What I have not seen presented in testimony is the fact that frequently research around impacts to human, wildlife and ecological

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health and the use of glyphosate, has many times intentionally obfuscated outcomes, and has been unduly influenced by the producers of this product.

Please see:

"The Monsanto Papers: Poisoning the Scientific Well," by Leemon McHenry (2018) "Roundup litigation discovery documents: implications for public health and journal ethics," by Sheldon Krimsky and Carey Gillam (June 2018)

https://usrtk.org/pesticides/read-the-emails-texts-that-show-epa-efforts-to-slow-atsdr-glyphosa te-review/

Letter to Nature by Stéphane Horel and Stéphane Foucart (March 2018)

As research grows in the arena of glyphosate's impacts, we are beginning to understand the mechanisms that bring about harmful changes. Many of these studies indicate that low exposures to this chemical are problematic and result in detrimental outcomes. Unfortunately, these studies rarely take into consideration the synergistic effects of all the toxic exposures that assault us and the world we live in. It must be recognized there are no borders that stop these onslaughts and there is no place 'away' from their consequences. Being aware of that should move us to make the wisest choices possible.

It must also be stated that some of the even more harmful elements of herbicide and pesticide application involve the various surfactants and carrying agents utilized to render their use more impactful. These ingredients need not be identified by manufacturers as they are considered 'proprietary' information and therefore are unknown and unregulated. The Research Implications of Glyphosate and Other Synthetic Herbicides and Pesticides Regarding Human and Animal Health:

In the past, The Committee has been apprised that biomonitoring has revealed that most Americans have glyphosate levels detectable in their blood and urine, most especially in young children. It is readily accepted by scientists that children experience impacts from toxic exposures at ten times the rates of adults.

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There is evidence linking glyphosate application to cancer and other health problems. Research reveals:

Links between glyphosate and diffuse large B-cell lymphoma.

A compelling link between glyphosate-based herbicides and non-Hodgkin lymphoma
Endocrine disruption, fertility, and reproductive concerns. Low doses may affect female

fertility.

 Exposures may result in reproductive disruptions in animals as well as humans. Please see:

 2018 Argentine study found impaired female reproductive performance and congenital anomalies in the next generation including increased spontaneous abortion rates in pregnant female farm workers.

 2017 study in Indiana found pregnant women with levels of glyphosate in urine samples that significantly correlated with shortened pregnancy lengths

• 2011 study in Reproductive Toxicology reported that glyphosate impairs male offspring reproductive development

Studies have linked low exposures of glyphosate herbicides to fatty liver disease in rats and research has linked glyphosate residues in food to adverse effects to the human out microbiome likely contributing to dysbiosis, and other associated diseases including celiac disease, inflammatory bowel disease and irritable bowel syndrome. These interferences in the gut microbiome may be involved in increased depression and anxiety.

Please see: New glyphosate papers point to "urgency" for more research on chemical impact to human health, by Carey Gillam, USRTK (11.23.2020)

What Is a Way to Understand Toxic Exposures? It is often said, "the dose is the poison." I like to use the analogy of a sponge to demonstrate what the daily bath of toxic exposures does to human health. Consider that we are each a very individual and unique sponge with differing absorption capacities. Every day our personal sponge is soaking up what is in our environment.

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We will each reach our saturation capacity at different points. When we attain our personal saturation limit, we will begin to drip because we cannot contain any more. That 'dripping' is a picture of symptoms and disease. What happens to us when our bodies can no longer accommodate what we are absorbing.

It can be difficult to make the argument for cause and effect because we are not all 'falling ill' at the same time, though we are, in fact, all being affected. Many factors influence outcomes. Some of those are genetics and predispositions; specific environments and exposures. But over time, people are more frequently presenting with symptoms and diseases that are not readily identified. And diseases we know are now being linked to environmental factors. Should we be asking some pertinent questions?

How Do We Think About the Future of Our Forests?

Even if you are inclined to dismiss the potential hazard of aerial spraying of glyphosate on our forests, it must be acknowledged that The Committee has previously heard testimony from the organic farmers and gardeners of the state relating how this practice of raining synthetic plant killers and pesticides from the skies poses real difficulties for maintaining their livelihoods. Drift from spraying can contaminate their lands and crops and render them ineligible to be considered organic producers.

I expect that one of the arguments you may hear in support of this aerial spraying will come from the large timber harvesters as well as local loggers and landowners who will try to convince you that maintaining this practice of 'forest management' is good for the economy and jobs. But to argue that honestly, it must be admitted that there is an unstated assertion that one form of livelihood is of more value than another.

Additionally, there is the mounting evidence that the use of synthetic herbicides and pesticides is decimating the populations of our pollinators, the bees, and butterflies, particularly the monarch butterfly. That has the suggestion that our food supply is endangered and that should be of concern to all of us.

What Are the Implications for Future Decision Making?

The rights of all the stakeholders must be factored into future decision making. And none should be arbitrarily weighted as having more worth than another. In fact, there could be a case

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made that those who have suffered injustice around such assessments in the past, should be first to be heard and considered going forward.

Our magnificent forests and environs are some of our most valuable resources and treasures. The people who work in these forests, the people who enjoy these forests recreationally, and the Indigenous Peoples who may forage these forests in keeping with their cultural traditions, should have the certainty they are not exposing themselves to undo harm as they pursue these endeavors.

Is There a Safer Path for the Future?

Would it perhaps be a wise approach to consider less lethal and more integrated methods to achieve our ends in forest management? Could we adopt practices that do not rely solely on proven toxic substances? Most principally the practice of aerial application?

I hope The Committee can see the value of passing this legislation out of Committee As

Ought To Pass. And additionally, promoting policies that will result in the flourishing of our forests and our farms and will at the same time protect the health of our citizens and our environment. Please see: https://www.researchgate.net/publication/254769876_Towards_reduced_herbicide_use_in_forest_vegetation_management https://blogs.oregonstate.edu/collegeofforestry/2019/04/09/herbicide-research-answers-questions/ Thank you for considering my comments. Jacquelyn C. Elliott 148 West Road Waterboro, ME 04087-3210 (207) 247-0103 j.c.elliott@roadrunner.com