



**Testimony in Support of L.D. 125 –
An Act To Prohibit the Aerial Spraying of Glyphosate and Other Synthetic Herbicides for the
Purpose of Silviculture
March 2, 2021**

Good afternoon Senator Dill, Representative O’Neil and Members of the Agriculture, Conservation, and Forestry Committee. I am Melanie Sturm, the Forests and Wildlife Director at the Natural Resources Council of Maine, and I am providing testimony in support of LD 125.

Glyphosate is the world’s most widely used herbicide. With increased use comes increased risk of exposure. In the last few years, multiple public health agencies and technical experts have raised new and credible concerns about the impact of glyphosate on both humans and the environment. For example, the International Agency for Research on Cancer, which is part of the World Health Organization, classifies glyphosate as "probably carcinogenic." While the U.S. EPA concluded that glyphosate is not likely to be carcinogenic to humans, the studies relied upon by the EPA were primarily conducted by the makers of glyphosate and the studies referenced by EPA evaluated the effects of pure glyphosate, not products containing glyphosate.¹ In addition, recent independent studies found a “compelling link” between glyphosate-based herbicides and an increased risk of non-Hodgkin’s lymphoma in humans.²

As a testament to the concern around glyphosate, in at least three separate lawsuits, juries have concluded that glyphosate caused significant human health injuries and courts awarded millions of dollars in damages to those injured by the herbicide. As of 2019, 18,000 other cases are pending.³ Leaders in Australia, France, and Germany have taken action to ban glyphosate.^{4 5}

Regarding the impact of glyphosate on the environment, evidence is growing that glyphosate-containing herbicides may impact the metabolism, growth, behavior, and reproduction of certain fishes, mollusks, and insects⁶ as well as the survival of amphibians.⁷ Two 2018 studies found that glyphosate could be altering the essential gut bacteria of bees, harming the weight and survival rate of immature bees and

¹ Environmental Sciences Europe, 2019, 31:2 https://hygeia-analytics.com/wp-content/uploads/2019/01/FINAL_Published_1-14-19.pdf

² <https://www.sciencedirect.com/science/article/pii/S1383574218300887>

³ <https://www.dw.com/en/germany-set-to-ban-glyphosate-from-end-of-2023/a-50282891>

⁴ <https://www.dw.com/en/austrian-parliament-votes-to-ban-glyphosate-weedkiller/a-49450418>

⁵ <https://www.dw.com/en/germany-set-to-ban-glyphosate-from-end-of-2023/a-50282891>

⁶ <https://www.ehn.org/whats-the-worlds-most-widely-used-herbicide-doing-to-tiny-critters-2631750527.html?rebellitem=1#rebellitem1>

⁷ <https://www.journalofherpetology.org/doi/pdfplus/10.1670/16-092>

increasing their susceptibility to infection.^{8 9} Other studies have suggested a correlation between the use of glyphosate in agriculture and a decline in Monarch butterfly populations.¹⁰

Related to soil productivity, some research suggests that glyphosate may be affecting soil microbes. Soil microbes are essential for environmental processes such as carbon and nutrient cycling.¹¹

Finally, questions have been raised about the effects of glyphosate on microscopic algae, the base of the aquatic food web, and on certain types of bacteria that are an important part of the terrestrial food web.¹² Adverse effects on the foundation of the aquatic and terrestrial food webs could have cascading ecological effects.

More research is needed to fully understand how glyphosate affects humans and the environment, yet the growing body of research about the chemical's significant, adverse effects combined with the precautionary principle¹³ suggest that the state should take steps to minimize the risks posed by glyphosate to the environment and to Maine people.

Maine's large industrial landowners rely heavily on chemical herbicides and their use has increased over the past several years, according to Silvicultural Activities Reports published by the Maine Forest Service. We ultimately believe silvicultural methods should depend on chemical herbicides as little as possible and instead promote other science-based strategies for controlling pests.

Closer regulation on the use of glyphosate is a step in the right direction, which is why NRCM supports LD 125. Thank you for your time and consideration of this issue.

⁸ <https://www.ncbi.nlm.nih.gov/pubmed/29992812>

⁹ <https://www.pnas.org/content/115/41/10305>

¹⁰ <https://onlinelibrary.wiley.com/doi/full/10.1111/ecog.02719>

¹¹ <https://www.ehn.org/whats-the-worlds-most-widely-used-herbicide-doing-to-tiny-critters-2631750527.html?rebelltitem=1#rebelltitem1>

¹² Id.

¹³ The precautionary principle requires that, if there is a strong suspicion that a certain activity may have environmentally harmful consequences, it is better to control that activity now rather than to wait for incontrovertible scientific evidence.