

Testimony to House Agriculture & Forestry Committee re: H.626

Maddie Kempner, NOFA-VT Policy Director | February 9, 2022

I've been tracking this issue since 2016 when the legislature created the Pollinator Protection Committee. I have appreciated the testimony of other witnesses and the committee's thoughtful discussion of this topic over the past couple of weeks.

I want to emphasize that further study into the impacts of neonics on pollinators in Vermont is not what is needed, as you just heard from Dr. Alger.

I think we know what we need to do. What is needed is specific action to:

- 1) limit the use of neonic treated seeds to the context of a specifically identified pest problem - basically, implement Integrated Pest Management (IPM). This is the approach that can help us begin to shift away from the pattern of replacing a toxic pesticide with an even more toxic pesticide.
- 2) support farmers in shifting to IPM from the prophylactic use that has become (in fairly recent history) current accepted practice and potentially support farmers directly in sourcing untreated seed, and
- 3) require rulemaking from the Agency to implement IPM as the [Pollinator Protection Committee recommended](#) a full 5 years ago (see pg. 7).

While the Ag Innovation Board was created to address similar topics to this, I'm not convinced we even need to have them take this up. We know what we need to do.

This issue has been very thoroughly studied, and recent literature reviews in MA ([December 2019](#)) and NY ([Cornell Report, 2020](#)) have confirmed much of what you have heard in testimony over the past couple of weeks, including the testimony you just heard from Dr. Alger.

Namely, the following points are important to reiterate. These seed treatments are harmful to pollinators and other wildlife. They are not generally increasing yields or providing other benefits to farmers. They are being used incredibly widely with no regard to whether they are actually needed to combat a specific pest problem.

- The impacts of these pesticides are well understood. Some of the impacts Dr. Alger, Andrew, and many others have referenced are alarming to me - these sublethal effects like reduced bodyweight, inability to navigate, shortened lifespan, reproductive harm, etc. I think these should be alarming to all of us, and I'll tell you why.
- When we have overwhelming evidence demonstrating that pesticides are harming humans in these sublethal ways, we would (I hope) take action. In fact the federal government has recently prohibited the use of chlorpyrifos, which was found to have neurotoxic effects in children, on food crops. I'm not suggesting we need to ban these per se, but we know they are highly toxic to the pollinators that are the building blocks of our food supply. We need to start seeing pollinators' health and our health and ability to feed ourselves as inextricably linked. We should care about bees and beekeepers as much as we care about farmers, and vice versa.
- The 2020 [Cornell Report](#) found (see pg. 22) "**While seed treatments benefit farmers when there is high early-season pest pressure, these benefits are limited to a small proportion of fields. Specifically, 87-93% of field trials find no increase (or a decrease) in corn yield compared to chemical alternatives or untreated controls when neonicotinoid-treated seeds are used in corn fields within the state, region,**

or North America." Furthermore, "**compared to plots using no insecticides, 89% of field trials observe no increase in corn yield when neonicotinoid-treated seeds are used."**

- Field trials results were similar for soybean yields (pg. 22).
- The Cornell Report confirms a lot of what Heather Darby shared in her testimony last week, *with one notable exception*. The [report](#) found (see pg. 128) that **untreated seed or seed with only fungicide applied were significantly cheaper (\$20.15/acre and \$6.80/acre, respectively) than neonicotinoid-treated seeds.**
- In response to concerns about Vermont as a very small market for untreated seeds. We heard this argument repeatedly around Vermont's GMO labeling law. "Companies are not going to change their labels just to sell in a state like Vermont." Guess what? They did. In the time between when our mandatory labeling law went into effect in 2014 and nearly 7 years later when the federal labeling law took effect, companies did in fact change their labels to comply with Vermont law. And instead of companies pulling their products from Vermont shelves, as we heard they would from retailers and other opposition groups, the opposite happened - companies labeled their products everywhere, so consumers across the country benefited from our law.
- Imagine if Vermont could begin to catalyze the same shift for farmers who are looking to source untreated seed. And to be clear, it is not farmers I'm suggesting we need to be putting pressure on - it's the companies who can and do provide untreated seed to other markets, who can provide them to our farmers too. But we need a substantial shift toward implementing IPM through our state regulators and technical service providers in order to make that happen.

If we look at this from a cost-benefit perspective - when the economic benefit to farmers of the current use patterns is placed up against the known harms to honey bees and other pollinators, it is clear that we cannot and should not continue to operate as we currently are.

I also think it's important to clarify that the rules that Cary showed the committee last week do not address treated seeds, which are the primary modality this committee has been hearing testimony on for the past two weeks. Furthermore, the steps these rules put in place to theoretically protect pollinator populations will do nothing to address the impacts of neonicotinoids on non-target species. Buffers, application times and methods designed to avoid pollinator exposure that appear in the proposed regulations, DO NOT APPLY to systemic pesticides such as neonicotinoids. Once a systemic pesticide is in a plant's system, the plant is toxic to any insect that visits the plant for the rest of that plant's life which can potentially be a year or more. There is no preventing pollinator exposure to systemic neonicotinoid pesticides through the timing of application if that application occurs at any time prior to flowering.

Again, while I understand that the Ag Innovation Board was created to address similar topics to this, the legislature already convened a specific advisory committee (the Pollinator Protection Committee) to address this issue back in 2016. We have their recommendations, along with the testimony from the many experts you've heard from over the past two weeks, and the past four years. We know what we need to do.

I can imagine it may be useful to have the Ag Innovation Board inform the Agency's rulemaking process and especially the ways that funding and staffing can be increased to support farmers in making the transition to IPM. However, we have seen that we need IPM to be required through rulemaking in order for it to happen, so **I urge you to set a date by which the Agency**

must engage in that rulemaking process, which is separate from and additional to the rules that will be at ICAR next Monday.

What is needed is specific action to:

- 1) limit the use of neonic treated seeds to the context of a specifically identified pest problem,
- 2) support farmers in shifting to IPM from the prophylactic use that has become common practice and potentially support farmers in sourcing untreated seed, and
- 3) require rulemaking from the Agency to implement IPM as the Pollinator Protection Committee recommended a full 5 years ago.

The first and second actions we can accomplish, in part, by providing funding to Heather Darby's pilot project and funding UVM Extension and other service providers to help farmers implement IPM and source untreated seed.

The third we can accomplish by maintaining the requirement in this bill that AAFM promulgate rules requiring IPM by a specific date, so it doesn't take another 5 years to get the same recommendations from the Ag Innovation Board that we already have from PPC but the Agency has not acted on regarding treated seed.

No reasonable person would see these actions as legislating based on emotion. The science is well established. The impacts on pollinators and lack of benefits to farmers from this prophylactic use are known.

No amount of money we might spend or legislation we might pass in the future can bring these species back. Once we lose them, they're gone – and with them, all the pollination services our agriculture, medicine, and functioning ecosystems rely on.