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MINISTER MURRAY SPENT A MORNING WITH OBA DIRECTOR, ANDRE FLYS OF PIONEER BRAND HONEY LEARNING MORE ABOUT BEES AND BEEKEEPING. PHOTOS BY CHRISTINA GAPIC.

GLEN MURRAY

OBA DIRECTOR JULIE WHITE AND GLEN MURRAY, MINISTER OF THE ENVIRONMENT AND CLIMATE CHANGE. TALK ABOUT BEES ON THE EVE OF THE RELEASE OF THE REGULATIONS GOVERNING THE USE OF NEONICOTINOID PESTICIDES ON CORN AND SOY. MINISTER MURRAY AND MINISTER LEAL. HIS COUNTERPART AT OMAFRA, HAVE BEEN TASKED WITH ACHIEVING THE GOVERNMENT OF ONTARIO'S TARGET OF AN 80% REDUCTION IN THE ACREAGE EXPOSED TO NEONICOTINOID TREATED SEEDS BY 2017.

"WHAT I WOULD LIKE TO SEE HAPPEN, AND I AM GOING TO BE PUSHING VERY, VERY HARD ON THE FEDERAL MINISTER OF HEALTH GOING FORWARD, IS THAT WE HAVE A MUCH MORE RIGOROUS STANDARD, THAT WE DON'T ALLOW THESE KINDS OF PESTICIDES AND TOXINS IN OUR ENVIRONMENT ON A WIDESPREAD USE WITHOUT SIGNIFICANT TESTING."

Thank you so much for meeting with us, Minister, and for giving us the opportunity to share your thoughts and policy directions with our members. It's clear that you have a commitment to the issue of pollinators, and have had for some time. Can you tell us how you got involved in these issues?

It started for me about three or four years ago, when I chaired the National Roundtable on the Environment and the Economy. This is where I heard from the scientists that, if you want to understand what's happening to the environment, you have to pay attention to what's happening with birds and bees. And I found out that the ten most common bird species had declined in population by 50% and that really shocked me. So I started looking into that, and I realized that it's not just about the species that are in the margins but that we are also not paying enough attention to catastrophic species loss. That's when I learned about dramatic bee losses from the United States Department of Agriculture (USDA). So one day, I came into a meeting with these bee loss numbers and I said, "It seems like we are not looking at bees." This was just months after Kathleen had

become premier – she was also minister of Agriculture and Food – and she said, "I hear you, I think we should do something." And so she set up the Bee Health Working Group. It started to make some progress but couldn't land on a formula. And then just at that point, we had an election. One day she called me into her office and said she wanted me to be the minister of the Environment and Climate Change (MOECC), and one of the things she wanted me to pick up on was the bee issue. Shortly after that, the issue moved from Animal Health to the MOECC as a toxics issue. So it was three years of getting more and more aware and involved in the bee issue, and then moving forward with real progress.

I still have major concerns about monarchs and about birds, and we are working with the Ministry of Natural Resources on these issues. But we have a crisis on biodiversity, and bees are the one thing that everyone understands. So while it is about bees, it's also about people understanding the problems of extinction of species, catastrophic species loss, and what the loss of pollinators will mean to our food supply and the livability of the planet, the health of our planet and the future of our species.

ISSUES MANAGEMENT





Invoking the precautionary principle was a bold move. Can you talk more about how and why you chose to use this approach?

Again, it goes back to when I chaired the Roundtable on the Environment. I was exposed to a lot of scientists and I was told that our climate was changing so radically, and so much faster than anyone was anticipating, that the likelihood of major catastrophic weather events as a result of changing climate conditions was so critical that we had to go back to the fundamental principle in environmental law which is the precautionary principle. This principle basically says that authorities have to start treating the environment with a similar level of precaution that a Medical Officer of Health uses to make a decision about a health emergency. Which means we need to base our decisions on whether there is a preponderance of evidence of thoughtful, independent scientists to make a measured judgment that there is enough risk to a species - or to the integrity of an ecosystem – that the government should act to prevent irreversible damage, loss of a species, or a catastrophic set of consequences that cannot be resolved later. So when we looked at the body of evidence related to neonicotinoids, while not iron-clad conclusive, there was certainly more than substantive evidence from independent researchers with good credentials indicating that these chemicals pose a real risk to bees and other pollinators, and that the continued use of this as a widespread pesticide, especially prophylactically, posed a significant threat.

The province has certain capacities with regard to regulating toxic chemicals, but the approval process rests with the federal government. What has been your relationship to the Pest Management Regulatory Agency (PMRA) on this issue?

Eight months into the job, I've come to the conclusion that it is frustrating for everyone – beekeepers, growers, and policymakers – to have to deal with these issues through the back end of the process. Once a chemical is out there, and it's on a mass scale in the complex environment of stressors on bees and farms, it's difficult to sort out the role of which chemical is causing harm and which are giving benefits because there are so many variables. It's much easier to do this upfront, if you have higher standards, more rigour and more testing. If you allow something like neonicotinoids to be used on 90% of corn in the Midwest, which is nearly half a continent of pesticide use, how do you manage this after? The farmer perceives the benefit whether there is or is not, and it's much harder to take something away than it is to not provide it in the first place. What I would like to see happen – and I am going to be pushing very, very hard on the federal minister of health going forward – is that we have a much more rigorous standard, that we don't allow these kinds of pesticides and toxins in our environment on a widespread use without significant testing. We need to get away from this idea of 'conditional' approvals, and apply standards similar to pharmaceutical testing. Testing should be done over a couple of years, should employ real field studies which should be peer reviewed, and not just rely on industry-funded research. Better science and better data will lead to better decisions. If we front-end load the responsibility for getting it right then we don't make this the problem of farmers and beekeepers who don't need half-baked research and pesticide management systems that don't work. If the approval process at PMRA was addressed, we would have a lot less conflict.

"ONTARIANS CARE ABOUT THEIR ENVIRONMENT, CARE ABOUT POLLINATORS -CARE ABOUT FARMERS, TOO - AND THEY WANT TO SEE THEIR GOVERNMENT ACT."



Can you explain this new pesticide class? It seems that currently the only components are corn and soy seeds treated with clothianidin, imidacloprid, and thiamethoxam.

This new Class 12 category is intended to deal with the family of neonicotinoids, and as it grows we can actually quickly move others in there. This class allows us more flexibility. Part of our concern is that we've heard that there may be a whole new series of brands coming down that river that are very similar to neonicotinoids, so we could review the list as we go forward, to head it off at the pass. We needed a new class that recognizes how unique this product is, and we've got that.

Our biggest concern is related to the phasing in of the professional oversight and verification. This is a significant issue for us.

I encourage you to raise that through the reg posting. The challenge of government is to build solutions that work. What was most important to me – given we had a limited amount of time – was to meet the goal of 80% by 2017, which we did. But we needed time to phase in independent verification for two reasons. First is that we need properly qualified people to do the independent verifications who aren't on anyone's payroll, and that is going to take about 24 months to build that team. The second reason is that it's important to keep good will on all sides. The grain farmers kept saying, "Give us time to do this," so they have a transition year where they could reduce by 50% but they can go further.

We were also wondering about the exemptions for crops such as sweet corn.

They are small numbers and there were market sensitivities around that, but we can always reconsider these things later. This is not the end. Our research is advancing. We are doing a lot more monitoring of our watersheds and the impact of these on not just managed bees but on water invertebrates, on amphibians, and on wild pollinators. We don't have a lot of good data on aquatic species or on wild pollinators, but we're going to be paying a lot more attention to that. And as the data come in, here in Ontario and globally, we will be reviewing these regulations because we have some real challenges. This is just the beginning of our research. In the future we'll have better data on causes of crop failures, we'll have better data on managed bees and other pollinators.

We see this as the ministry stepping forward and being more comprehensive and more rigorous in the level of research we are doing so that we understand these systemic neurotoxins and what the implications are for the environment and species, and whether we have to take stronger or lesser action. The future is going to be based on that continuing research.

Are you expecting much push-back on these new regs?

It is a big, powerful industry and there are billions of dollars of revenue that come from pesticides and from coated seeds, so there is a lot of money in play. And when there is a lot of money at stake, you have economic interests that tend to watch very carefully. But Ontarians care about their environment, care about pollinators – care about farmers, too – and they want to see their government act. They aren't going to have much patience with those who stand in the way of protecting their bees and protecting the integrity of our ecosystems.

A SUMMARY OF OBA'S RESPONSE TO THE DRAFT REGULATIONS

IN NOVEMBER, THE GOVERNMENT OF ONTARIO

introduced a comprehensive Pollinator Health Action Plan to improve the state of pollinator health in Ontario. As a first step, the province is proposing a change in the pesticides regulation to address the impact that pesticide exposure is having on pollinator health. The draft regulatory amendments are intended to reduce the number of acres planted with neonicotinoid insecticide-treated corn and soybean seeds by 80% by 2017.

OBA appreciates the challenges of creating and implementing a regulatory framework within a prescribed period of time. However, if the government is to reach or even achieve meaningful progress toward its targets, it must address the following shortcomings.

1. Section 8.2 (2) and Schedules 1-3. Under the proposed scenario, bees and beekeepers will not be protected under the full weight of the regulations until the 2020 planting season. Because of the government's concern about capacity for oversight, scheduled phasing-in of third-party oversight by county currently delays the requirement for professional pest advisors to the 2019 and 2020 planting seasons in the areas of highest concentration of corn and soy. As these areas also have the largest concentration of managed honey bee colonies, it is unlikely that the government will achieve its goal of 15% overwintering loss unless this is corrected.

Recommendation: OBA strongly requests that heavy corn and soy planting areas are given first priority and that this section be accomplished in no more than two phases, finishing up on or before August 31, 2018.

2.8.1 (1) The regulations have specified Class 12 as pesticide corn and soy seeds treated with neonicotinoid pesticides: imidacloprid, thiamethoxam and clothianidin. This definition leaves the door open to unregulated substitution of treated seeds with foliar sprays or soil drenches. Since all neonicotinoids are systemic and harmful to bees, the regulation should not be limited to seed treatments and exempt other delivery options. These exceptions would defeat the intent of the regulations, and would possibly lead to more neonicotinoids on corn

and soy. Further, new systemics could be registered to replace the current neonicotinoids defined under Class 12, thereby continuing the exposure of bees to highly deadly neurotoxins via soil, water, pollen and nectar through the same broad prophylactic use.

Recommendation: Class 12 must apply to all systemic pesticides that expose bees to toxins via planting dust, soil and water, pollen and nectar; and further, to all delivery systems such as foliar sprays and soil drenches.

3. The proposed regulations are silent on the issue of dosage. By applying higher concentrations of pesticide treatments, the total volume of neonics put into dust, soil and water could actually increase.

Recommendation: Concentrations of neonics on seed treatments need to be monitored and controlled, ensuring the lowest dosage necessary for the specific application.

4.1. (1) Currently, the definition of 'corn' means grain corn and does not include popping corn, sweet corn or corn used for the production of seed. While only a small percentage of corn acreage may be sweet corn, its negative impact on bees is much greater because bees are attracted to, and will readily collect pollen from, sweet corn.

Recommendation: Include sweet corn in the definition of 'corn'.

5. Ontario beekeepers are particularly vulnerable to pesticide exposure at pollination transport staging areas. Ontario queen breeders' invaluable breeding stock is also at risk of pesticide poisoning incidents, especially in the corn and soy planting months of May and June.

Recommendation: The government is urged to create neonicotinoidfree planting zones with a five-kilometre radius around all designated staging and queen breeding areas. The OBA can help identify those locations for OMAFRA.

FIND THE DRAFT REGS AND OBA'S FULL RESPONSE AT ONTARIOBEE.COM/NEONICS