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Chair

Mr. Larry Miller

Standing Committee on Agriculture and Agri-Food

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● (1530)

[*English*]

The Chair (Mr. Larry Miller (Bruce—Grey—Owen Sound, CPC)): I'll call our meeting to order.

We'd like to thank our witnesses for being here. We have some in person, and we have Mr. Rod Scarlett joining us by video conference.

To the committee, with reference to today's witnesses, we have a small budget to pass. I'm waiting for your guidance on whether you want to deal with that right now—it's just housekeeping—or we can deal with it at the end.

Mr. Pierre Lemieux (Glengarry—Prescott—Russell, CPC): Let's deal with it at the end.

The Chair: That's good with everybody.

Mr. Scarlett, we'll start with you, just in case we experience any technical problems. You have ten minutes or less, please.

Mr. Rod Scarlett (Executive Director, Canadian Honey Council): Thank you very much, Mr. Chairman.

Mr. Chairman and members of the committee, I want to begin by thanking the committee members for allowing the Canadian Honey Council the opportunity to address you this afternoon.

The CHC is truly a national organization, representing all beekeeping organizations from British Columbia to the Maritimes. Our membership is made up of the provincial beekeeping associations.

In 2010-11, there were approximately 7,200 beekeepers in Canada, wintering 641,990 colonies. Approximately 75% of those colonies are located in western Canada. Agriculture and Agri-Food Canada has indicated that our sector provides direct and indirect economic benefits of nearly $2.7 billion to the economy a year.

The honeybee, honey production, and the pollination industry play an important and growing role in Canada and the world. Worldwide attention to the health of the honeybee has helped focus public attention on the industry itself.

In 2011, the Canadian Association of Professional Apiculturalists devised a new survey procedure that facilitated the direct comparison of key winter loss data across regions in Canada. In a statement on honeybee losses in Canada in 2011, based on the results from nine provinces, “29.3% of the colonies that were wintered during 2010-11 died or were deemed [to be] too weak to be commercially productive.” This ranged from a high of 43% in Ontario to a low of 22% in Saskatchewan. This represents twice the long-term winter loss rate for Canada and a substantial increase over the loss rate for 2009-10, which was 21%. This loss is greater than the 2009-10 mortality figure of 21.0%, and is similar to the three winters previous, where the mortality rates were 33.9%, 35%, and 29%.

There is good news, however, this year, in that it appears the winter losses have dropped dramatically, with the exception of some individual and regional variances. Regarding the long-term trend of winter losses, according to CAPA, a number of common reasons were reported by extension professionals in Canada. These include higher numbers of weak colonies in the fall months while preparing for winter, ineffective varroa control leading to higher mite populations on bees over the wintering period, higher than normal rates of queen loss, and high levels of nosema. Varroa is a pest; nosema is a spore. In addition, weather, environmental factors, pesticides, pests, pathogens, and management all contribute to the declining bee population, and according to CAPA, further research is needed to establish conclusive links to ongoing patterns of colony death.

I want to stress that this pertains to ongoing patterns of winter losses and not the acute event of bee deaths that occurred in Ontario earlier this spring.

In January, the Canadian Honey Council held a national symposium to discuss the state of the industry. Representatives from all provinces attended, and for these purposes two recommendations were put forward. First, we need to develop a national strategy addressing stock replacement and hive health, focusing on domestic self-sufficiency. Second, we need to develop a national baseline on the state of health of our bees. The U.S. has done this, and it's my understanding, with the support of the U.S. government, that it's time we do the same.

Despite the importance of honeybee pollination and the honey sectors, it's important to point out that much of the responsibility for the sector lies in the hands of the provinces. Provincial apiarists do an outstanding job looking after the sector.

Recently, the National Bee Diagnostic Centre, which is located in Beaverlodge and is funded by the federal government, has been a positive step by the federal government in the right direction. But Canada still lags far behind other countries. And until recently, only one researcher-scientist, on AAFC staff was there to study honeybees.

There are no federal bee programs in Canada. Much needs to be done. Whether this year's low winter losses represent the start of a promising trend or are an aberration remains to be seen. I would assume that the good fortune many beekeepers are experiencing this year does not address the underlying factors that have impacted beekeepers over the last five years. We need to be diligent in ensuring that beekeepers have options for success.

Thank you.

● (1535)

The Chair: Thank you very much.

We'll now move to Mr. Bill Ferguson, from Ferguson Apiaries, for 10 minutes or less, please.

Mr. Bill Ferguson (Owner, Ferguson Apiaries): Thanks for the opportunity to appear before you. Thanks to Mr. Miller in particular, and to Dave Schuit, who got the ball rolling.

I suppose the first question I'd like to ask is, how many of you like pie? Without bees, we aren't going to have any.

Voices: Oh, oh!

Mr. Bill Ferguson: As for who we are, I'm a commercial beekeeper. I have 50 years of experience in the industry, so among us witnesses today, we have over a hundred years of experience. We do have an idea what's going on in the grassroots.

My situation for my bee losses this year was unique, in that they started planting corn in our area on April 8. At that time, on the Sunday—

No, they started on April 6, but on April 8 I got called by a neighbouring beekeeper within four miles of us who said his bees were coming out of the hives and dying. He asked if that was happening to me. I said that I'd have to go out and check my yard, because we have over 100 hives sitting behind our house and behind our honey house that we use for breeding operations.

I went and checked mine. There was nothing going on. I went and looked at his, and sure enough, they were dying. There was hardly any flying going on because it was just above freezing, and there was a cold wind. They had just planted corn about 600 feet north of him. They had planted 200 acres of corn. The bees had been coming out of there. From talking to him before I came down here, they were still dying, and that's just about two months ago.

As for what happened to me then, it was on the 12th that we were hit with the corn problem. I had talked to the farmer before then and asked him about what was in the corn and what was going on. He didn't have any idea of what was on the corn. He said he just buys it by the bag. They tell him to pay an extra $50 and they call it “fully loaded”. They don't know what's on it for seeding.

I was able to get hold of a label from some of the corn bags. I had heard all the information about what had been going on in the U.S. with the losses, and it looked like it was more of a chemical problem that was killing off the bees than some of the other things they were talking about.

He was getting ready to plant the field around us. It rained and he couldn't plant it for a day, so when he got around to planting it, which was on the 12th, there was frost that morning. The ground was wet, so I thought we were in good shape and we weren't going to have any problems.

Well, he planted it, and within an hour and a half we had bees coming out the front of our hives. I don't know how many of you are beekeepers and understand it, but bees can't maintain flight if they can't maintain a body temperature of 58 degrees. At freezing, they don't even bother coming out of the hive.

The bees started dying and the only thing that made sense was that the poison that was on the corn became airborne and floated across the bee yard. Floating across it.... We have to realize that bees are living organisms and they're giving off carbon dioxide and using oxygen at all times. Inside the middle of a cluster, where the bees are.... And they were super strong bees at that time. We'd fed them three pounds of pollen and they'd had two feedings of syrup because we were trying to get them in shape for our queen-breeding operation.

Well, after that, they started dying off that day and that has continued to this day. As we looked at it on the first two days, we were getting 200 bees dying a day. Now, I realize that it doesn't seem like a lot of bees when you think of the natural mortality, but what's happening with this particular chemical, from everything we've been told in literature.... I have here a copy of the EPA report on it, which we just picked up. I got it before we came. This chemical causes a paralysis of insects and affects their brains, so they die. The bees were dying in front of the hives. We knew it was the chemicals. We had a strong concern, especially knowing that this particular chemical had a half-life of at least 107 days.

So within the hive, we're not only losing the bees that are in front of the hive, within the traps.... We made up some traps to see what was actually happening, because if it was just something lying on the ground, the bees would climb out and away. We looked in the traps. We were finding dead bees and we were finding larvae. In my operation, the odd one had a queen that had died. Without a queen, a hive just collapses.

● (1540)

We are not just losing the bees we find in the trap; we are losing the ones that can't find their way home because of the nature of this chemical.

It was also killing the larvae and brood that were nine days younger. It had to be killing some of the older brood also, because they uncapped it and were pulling out fully developed larvae.

This has been kind of unique. The EPA got in touch with me, because in our yard, we also found a dead robin behind the hive. We realize that in nature, animals always go for the weakest and the most vulnerable. You can find birds in the beehives in the evening, and what they are doing is eating the dead bees that are dying off.

We don't have the reports back on that. We are as curious as anybody to know what happened to it.

Ultimately, the bees are being killed. The only thing we can understand that's changed in ours is the spray. It was the best wintering we'd had in several years. The mite levels were really low. We had no tracheal mites showing up. We tested for nosema last fall, and most hives didn't have it. And it was a really low count. We treated anyhow to make sure that we kept the numbers down.

I think that's about the gist of what's going on. I've been making notes every day this has been going on, based on recommendations from our provincial apiarist.

If there are any questions, I'm willing to answer them.

Thank you.

The Chair: Thank you very much.

We will now go to Mr. Davis Bryans for 10 minutes or less, please.

Mr. Davis Bryans (President, Munro Honey & Munro's Meadery): Thank you very much for inviting us here today.

I'm a fourth generation beekeeper. My brother and I run the operation. My son is also involved. We have about 3,000 hives. About a third of them were hit with corn spray this year.

What's happened in our instance, and I have some pictures to show later on, is that the bees went out healthy in the morning and were gathering pollen on some plants that had been contaminated by this poisoning. The only thing happening at this time of year was that corn was being planted. The bees came back loaded with pollen, and the other bees wouldn't let them in. We lost between 30% and 40% of the bees in the hive.

When you lose the flying bees, those are the foragers that bring honey back to feed the young bees so that they mature. So now the bees are starting to starve. We have to feed them to try to maintain the hives and keep them going.

We need to make a decision as to whether pollinators are expendable, including honeybees. This poison is not just hitting honeybees. It's hitting all pollinating insects. We have to figure out who is responsible for protecting all these insects, frogs, fish, etc. They are all interconnected, and it's affecting all of them.

There is no insurance of any kind available for beekeepers for this kind of problem. We feel that these products weren't properly field tested to begin with when they brought them out. There should have been at least a two-year period for testing and overwintering of the bees. It just hasn't been tested properly.

This stuff is systemic. It gets into the plant, and it makes the plant toxic. It doesn't only hit the bees now; it's going to hit the bees later when the plants come into flower, because it makes the plant toxic again. These neonicotinoids probably should be banned, as they are in Europe. They are just not good products.

We need independent research that isn't funded by chemical companies. Our problem is that these chemical companies are the ones that are doing the testing. We need independent people to do the testing, because if you're a researcher, and you don't get the results these big companies want, you won't get hired again. It's hard for a researcher not to give them the results they want. They can make the figures the way they want to make them. We've seen it.

Is this product not conditionally registered so that if there is a problem, it should be pulled? These are some of the questions we want to ask. We just think that these companies are doing testing at our expense, and we'd like to know who is going to compensate us for this.

Thank you.

● (1545)

The Chair: Thank you very much.

Now we have Mr. David Schuit and Mrs. Hendrika Schuit. You have 10 minutes or less, please.

Mr. David Schuit (President, Saugeen Country Honey Inc.): Thank you, Mr. Miller, for inviting us to come to speak about the troubles we're having.

I will just mention that my wife and I were bee inspectors for OMAFRA for a few years, but we got so busy with our operation that we decided to give up working for OMAFRA and work full time with our own hives.

My wife will read our statement and we can carry on from there.

Mrs. Hendrika Schuit (Member, Saugeen Country Honey Inc.): First, we would like to thank Mr. Miller for inviting us to come to this meeting today. We really appreciate your interest in what's going on with the bee industry.

Mr. Miller asked us to share our story of what has been happening with our bees this year.

The bees came through winter exceptionally well, with the lowest mortality rate in years. The spring was mild and with some supplements in the form of sugar syrup and pollen substitute, they were ready to explode by the end of April. We started getting ready for splitting hives in the first week of May. This is done by adding an extra brood chamber to hives so the queen can continue to lay eggs and there is more room for the extra bees.

From beekeepers to the south of us, including Bill and Davis, we had heard reports of large numbers of bees dying after corn had been planted, but up to the beginning of May, we had not seen any evidence of that in our operation.

So far, of the 37 samples that have been taken in the province, 28 have come back positive with the chemical called neonicotinoids, which is used on corn.

On May 14, when David and our son and another worker came to the first yard of the day, they were surprised at the amount of dead bees outside the hive. We immediately called the health inspector and provincial apiarists, neither of whom were immediately available. The health inspector did get back to us at lunchtime and informed us that he would be coming to inspect and take samples. From the time we noticed the first yard affected, David and I went to a number of different yards, but they did not seem to be hit, with the exception of one yard beside that first yard we checked. After a number of bee yards were inspected by the health inspector and samples were taken, he informed us that the samples would not likely be tested at that time. They have been tested now, but we haven't received the results.

The one yard that David and I inspected together, where we found quite a number of dead bees, was not inspected by the health inspector because he had to go home. He informed us that he would not be coming back to take samples unless an exceptionally large number of dead bees showed up again. He encouraged us to continue to take samples if we wanted, but he was not sure if they would actually be tested because of problems with security and custody.

We continued to see bees dying in our yards, and hives that had been strong getting weaker and weaker. More and more corn was being planted in the area. We noticed that there was increased skunk and racoon activity in the bee yards, indicating that bees were being eaten by skunks and racoons, making it impossible to get good-sized samples.

When our home yard had a hive affected so badly that in front of the hive there was a carpet of dead bees an inch and a half thick and three feet out from the hive, we were at our wit's end. We took pictures. We have a couple of pictures with us if anybody's interested. The hive where the dead bees were was so strong only a week prior to this event, but corn had been planted on Tuesday all around our organic farm, and by Thursday morning, the hives were on a downward spiral. Some hives in the home yard were so weak that there may only have been a handful of bees in the hive. Our son was trying to find a frame of fresh larvae to graft queens from, but out of about 40 hives, he was not able to find one hive with a decent amount of larvae. He then went to a yard not too far from us which so far had not been affected and found lots of dead bees there as well.

A rough estimate would indicate there may be over 600 acres of corn and several hundred acres of soybeans in a one-mile radius around our home yard. That's not even taking into account all the corn planted around the other 32 bee yards.

Different people suggested that we call our MP about this, but I really didn't think it would do any good. Then, with all this loss, I could wait no longer, so we called Mr. Miller's office. They informed us that he was not in, but he would get back to us in about two weeks. I said that I needed to speak to Mr. Miller then as my bees were dying. I was given the Ottawa office number and did get to speak to him that day.

Millions of our bees are dead and more bees are dying every day. I don't know how we're going to sustain this continuous loss of bees. If we don't get a decent crop of honey, we won't have honey to sell at the different markets we go to.

We are not the only beekeepers affected by this chemical used on corn and soybeans. There are many beekeepers with the same stories to tell.

● (1550)

The bee inspector for our area stopped by on Thursday—that's this past Thursday—and observed the hives in the home yard for about 20 minutes. He noticed that for the time of day and weather conditions there should have been a lot more activity. He said, you have a major problem here, meaning in this yard.

I can see it is a very painful way for the bees to die. They twist and kick with their tongues sticking out. In some cases, the venom can be seen coming from the stinger. They can no longer control their bodies, and appear to be in terrible pain and agony. Many queens are dying or being kicked out of the hive even before they are dead. Our daughter found a queen outside at the front entrance of a hive. When she picked it up, she held it in her hand. After a few minutes, the queen started kicking her legs, but could not move because she was paralyzed.

We need to have this chemical banned from the market if we want to continue to have bees and other pollinators to pollinate fruits and vegetables, and to continue to have local honey on our table.

Thank you.

The Chair: Thank you very much.

We will now move to questioning. Each member of the committee has five minutes, including the questions and answers. I try to be flexible, but if you could keep your answers reasonably brief, I'd appreciate it.

Mr. Allen, you have five minutes.

Mr. Malcolm Allen (Welland, NDP): Thank you, Chair. Thank you to all of you for coming.

Mr. Scarlett, I will start with you. I come from Niagara. We experienced a summer in March this year where we literally saw blossoms in every tender fruit imaginable, including apples and pears, come out. The head of the Vineland Research Station said to me, we are either going to have a lot of fruit, or we are going to have none at all, because we had 40 days before we were frost free when we actually saw that.

Is there any sense of what impact that had on bees, specifically in southwestern and south central Ontario, because of that, which was really summer-like conditions? It was 25 degrees Celsius. It wasn't just mild by any perspective. It was literally 25 degrees for about a solid week. Do you have any evidence of any impact that had on hives?

Mr. Rod Scarlett: The only impact I have heard of is in second-hand discussions with the president of the OBA. It only concerns one commercial beekeeper whose operation has been very good. Other than that, I have no statistical or factual evidence to make any claims.

Mr. Malcolm Allen: That would speak to what I have heard from everyone about this sense that we need some research into specifically what is happening with our bee industry and the kill rate. Of course, when we see these wild swings in temperature in the early season, what kind of impact that has on hives and bees in particular, if they come out, and then we get back into a...? We went back into a frost situation in Niagara where it went down to minus seven about 10 days later. There's an impact that has on a hive that thinks it's getting ready to start a season, and the season looks like it went back into winter.

I would ask you, Mr. Scarlett, as well as any others on the panel, what type of research would you like to see get done specifically around hives when it comes to not only this sense of whether it be CCD, or whether it be a poison from a pesticide, or indeed this climactic change where we're seeing with these wild fluctuations? Is there anything you would specifically like to see research done on that is non-binding, in the sense that it's not by a corporation who simply says, I'm doing it to make a dollar? I actually want to see research that talks about what the impacts are, and what perhaps are some solutions.

I will start with Mr. Scarlett, and perhaps work across the panel.

● (1555)

Mr. Rod Scarlett: Certainly. I will not comment on the Ontario bee kill and the research involved there, because that's kind of a separate issue.

On the long-term health and mortality of bees, certainly we need to do some research on weather. As I indicated in my preamble there, this year it appears that, on the whole, bees did very well over the course of the winter. All across Canada, the winter was relatively mild, so that may have had an impact. It could be that management practices have improved enough that beekeepers have been more successful in wintering.

But weather is certainly one key area. Varroa is another one. I think we have to maintain pesticides or treatment methods to stay ahead of the curve. We now have certain treatments that are getting to the stage where we're getting resistance, and we're not having enough new compounds, whether they be organic or non-organic, coming into the mainstream for beekeepers to use in order to be successful.

So you're right; I think the research is important. We'd certainly like to see a lot more, and we'd certainly like to see a lot more that is a little bit more directed to what the beekeepers need instead of what the researchers may need.

Mr. Malcolm Allen: Mr. Bryans, I know you raised some issues about the research earlier.

Mr. Davis Bryans: In terms of this issue, the bees were in excellent shape. Beekeepers were watching them. If they were hungry, they'd feed them. If they needed a pollen substitute, they'd feed them. It was a little earlier in the year, but when the dandelion season came, they were in great shape.

This is a different issue altogether. This is an insecticide poisoning. It's nothing to do with treating the bees beforehand. The bees came through the best they've ever come through. Anybody will tell you that. I have areas that didn't get hit and I have two boxes of honey sitting on them.

It just depends on whether they grew the corn or not. It's not weather-related. It's just poisoning that is causing the problem. We need to do something about it.

The Chair: You're out of time, Mr. Allen.

Mr. Payne, five minutes.

Mr. LaVar Payne (Medicine Hat, CPC): Thank you, Chair.

Thank you to all the witnesses today.

I have a few questions for you, Mr. Scarlett. I see on your website that one of the resolutions passed at your AGM was to ask the federal government—specifically, the pest management regulations—to approve the use of Apivar for 2012.

Could you tell me how successful you were at that? And how vital is that to your industry?

Mr. Rod Scarlett: It has been successful. I believe we're still on emergency use registration yet, but again, it is one of the tools that beekeepers need to be successful.

Mr. LaVar Payne: Okay.

I see you also asked CFIA to review their import conditions as they pertain to the small hive beetle. What was the result of that? Do you have any more rationale on that?

Mr. Rod Scarlett: That one is a little bit more difficult. CFIA, as you are well aware, is undergoing kind of a changeover in philosophies. The small hive beetle policy, as a national strategy, has kind of been by the wayside, so to speak.

We've suggested certain things to CFIA. We've passed a resolution. We have not heard back anything as of yet. Our resolution was sent to them in mid-January.

● (1600)

Mr. LaVar Payne: Okay.

You just heard the other panel members talking about the problem they've had with the corn. Have any of the western producers faced the same situation, do you know?

Mr. Rod Scarlett: This year I have not heard of any. Certainly if you go on the PMRA website, the same issue was raised in Quebec last year. The case studies and the reports are on the PMRA website. They did indicate that there was a probable cause.

Mr. LaVar Payne: Okay.

Have you heard anything about this particular seed being used in the U.S., and has that had any effect down there as well?

Mr. Rod Scarlett: The seed treatment is a family of treatments, a family of insecticides that is apparently used in the States, and there is a bunch of research out there. I think the other three panel members have been impacted by this directly, and they're probably better versed in the direct effects it has had on them.

Mr. LaVar Payne: Okay. Do other panel members want to comment on anything in the U.S.? Is this particular to one type of seed for corn or are there others?

Go ahead, anybody.

Mr. Bill Ferguson: We have experience with one at the moment, because the corns went in first. They're using the same type of poison on soybeans, and there are 22 different brand names that they use on these poisons. It's an neonicotinoid or an imidacloprid, and they break down into more deadly types of poison. From what we've read and all the information we have, they change.

There's a straight indication that these are the ones that are killing things off. All of us and most of the beekeepers have noticed over the last few years that there's been some sort of a slight kill-off, but we couldn't trace it to any place and didn't know what it was from. It wouldn't be that there'd be the numbers of bees dying off, but you'd see dead bees in front of the hive, and a hive doesn't want dead bees in front of it. It's just a natural defence mechanism that it has. It wants to clear everything out of the front of the hive so that predators don't know where it is. You'd see that in a tree or something like that in the natural circumstance. They would make sure of that. They don't want dead bees around the hive, because those would give an indication of where they're living. So they have a natural defence mechanism that way.

All I can say is that as far as we know, it is connected to the poison. There was a webinar put on by the U.S. I can't remember the name of the state that put it out. Was it Purdue?

Mr. Davis Bryans: It was Purdue University.

Mr. Bill Ferguson: I don't have the link to it here, but they showed how it was killing bees and they told us some facts that were rather scary about the stuff.

There's enough poison on one corn seed to kill 100,000 bees. It takes two nanograms of this poison to kill a bee. The air and dust coming out of the sprayers are 700,000 times stronger than that. I looked at those figures when I first heard them and I thought somebody was just saying that, but having seen the webinar, I have to take the word of the researchers who did that. It wasn't just somebody spouting off. I could see this stuff was pretty potent.

Just as a note, the EPA has linked this stuff to also affecting warm-blooded animals, and some of the things it's doing to them are quite horrendous.

The Chair: Okay.

Does anybody else want to comment on it?

Mr. Davis Bryans: I've talked to some beekeepers down in the States. I was talking to a David Hackenberg down there. He said that in New York State about 1,900 hives are affected, and Michigan is having problems. All across the Corn Belt beekeepers are actually moving out of those areas to try to get away from it. It's a major problem.

The Chair: Okay.

Mr. Schuit.

Mr. Frank Valeriote (Guelph, Lib.): Thank you, witnesses, for coming today to discuss the dilemma you're facing. Can you tell the committee what percentage of food production—

● (1605)

The Chair: Frank, sorry, but Mr. Schuit was just going to add a comment, and then I'll go to you.

Mr. Frank Valeriote: Oh, sorry.

The Chair: Mr. Schuit, go ahead.

Mr. David Schuit: I've seen how when they plant corn they have these air seeders that blow the corn down, and the residue of the chemical blows upwards and it goes airborne.

My thinking is that when this chemical goes airborne, it also lands on the land again, and then when we get high winds and so on, they blow it up again. So we're getting a continuous reaction of this chemical going airborne.

My boy just called me before I came into the meeting and he just about cried, because he's in the yard, and they're all dead. They're dying. I just don't know what to do. We love our business. This boy is 17 and he loves it. He just doesn't know what to do.

The Chair: Thank you.

We'll go to Mr. Valeriote, for five minutes.

Mr. Frank Valeriote: Thank you all for coming.

I want to express my regret for the circumstances in which you find yourselves and have caused you to come before our committee today.

Can any of you tell the committee what percentage of our food production is reliant on bees and pollination? Can anyone tell me?

Mr. Ferguson.

Mr. Bill Ferguson: We had something put together by our past business administrator, the OBA.

Mr. Frank Valeriote: What is the percentage? Can you give me that number?

Mr. Bill Ferguson: About 90% of the plants require insect pollination. Globally, it's $400 billion, and 75% of this pollination occurs through honeybees.

Mr. Frank Valeriote: Is that a report you can share with committee?

Mr. Bill Ferguson: I have several of them here.

Mr. Frank Valeriote: You can submit it later to our clerk. Perhaps he can use it for our edification and our report.

“The growing consensus among researchers”, and I'm reading now from a report we've received from the Library of Parliament, “is that multiple factors such as poor nutrition and exposure to pesticides, particularly to neonicotinoids”—the one you mentioned —“used to coat corn seeds, can interact to weaken colonies and make them susceptible to a virus-mediated collapse”.

That is consistent with what you're telling us today.

I'm just curious. Is that applied after the seed is spread, or is it applied to the seed before it's planted?

Mr. Schuit.

Mr. David Schuit: The seed itself is coated with the chemical. When it goes down into the ground, it's forced by air. When the air goes down, it causes, I think.... I've seen it. When they start up the air compressor, the dust and chemicals go airborne, and the winds take them about three miles.

I have hives dying in the centre of the bush.

Mr. Frank Valeriote: Do you know if there's a substitute for neonicotinoid-based pesticide?

Mr. Davis Bryans: I can tell you one thing. They're not offering it to farmers. Some farmers are looking to get something that's more bee-friendly, and the big companies are saying that they can't get it in.

They're treating every piece of corn with this product.

Mr. Frank Valeriote: Are you suggesting that there is a substitute, but they're not using it?

Mr. Davis Bryans: You don't need all these chemicals on the corn.

Mr. Frank Valeriote: Apart from needing or not needing....

Mr. Davis Bryans: You can grow corn without chemicals.

Mr. Frank Valeriote: I understand that. But if you choose to, is there a substitute for a neonicotinoid-based...?

Mr. Davis Bryans: There is not that I know of.

Mr. Frank Valeriote: There is not one you're aware of.

Mr. Davis Bryans: No.

Mr. Frank Valeriote: Okay, so we would have to investigate that further.

All right.

Did you have something to say, Mr. Schuit?

Mr. David Schuit: There is a gentlemen who was planting what I thought was corn. I was so upset that I ran up to him, and I started showing him pictures on my phone. I was really upset, and he said, “By the way, who are you?” I said, “I'm sorry. I'm David Schuit. My bees are dying.”

I asked him what he was planting. He said it was actually soybeans. I said that he had chemicals on his soybeans. He said, “No, you can eat them. There's no problem.”

I was shocked, because he was actually planting soybeans without chemicals on them. He has no problem doing it. He has great success.

It seems to be that when they put those chemicals on, they get a better assurance crop. It has something to do with bringing their premiums down a bit.

● (1610)

Mr. Frank Valeriote: I understand.

Mr. David Schuit: There's a real trick, though.

Mr. Frank Valeriote: Mr. Schuit, or any of you, is there a point at which your losses will reach a threshold where the vitality, the sustainability, of your hives will be at major risk?

Mr. David Schuit: I'm in real trouble. I am. I would say that my whole yard is 90% done.

Mr. Frank Valeriote: Do you know if there are other crops that are failing because of the failure or collapse of the beehives?

Mr. David Schuit: Do you mean for pollination?

Mr. Frank Valeriote: Yes, for pollination.

Mr. Davis Bryans: I don't think it's happened yet.

Mr. Frank Valeriote: It has not happened yet.

Are you taking advantage of any programs, any business risk management programs, through the government?

Mr. David Schuit: When it's chemicals, there is no coverage.

Mr. Frank Valeriote: Okay.

Finally, are you asking for any kind of moratorium, then, on the use of neonicotinoids until a full investigation is completed by American and Canadian researchers? Do you recommend that the researchers collaborate, because the issue is so serious that it would require a full investigation?

Mr. David Schuit: Exactly. I understand that Holland has banned it. Germany has banned it. France has banned it. There are quite a few countries in Europe that have banned it. They see the problem with this. They love their bees.

I don't know how I'm going to swing this one.

Mr. Frank Valeriote: Do I have more time, Mr. Chair?

The Chair: You're out of time.

Mr. Shipley, you have five minutes.

Mr. Bev Shipley (Lambton—Kent—Middlesex, CPC): Thank you, Mr. Chair, and I thank the witnesses for being here.

Mr. Bryans, you talked about the number of bees lost, as did Mr. Schuit, and Mr. Ferguson, too. How do you replace those bees? How do you replace the queens?

Also, if you replace them, how do you know that they're not going to be in the same situation in terms of the product? You said it was systemic. Is it in the hive, or do you know that? You've done some testing. I wonder if you could take a quick shot at that to help us understand it.

Mr. Davis Bryans: In my case, I'm not sure if it's in the hive. They tested the bees on the outside.

I lost probably 30% to 40% of the flying bees. That's like shooting the father and leaving the rest of the family at home and there's nobody to bring in anything for them to eat. That's basically what has happened. The bees are going to starve. There are still the nurse bees and the other bees in there. Now we're having to feed the bees to get them going. There were a lot of bees in the hives this year. We're hoping that we can work ourselves out of it.

In the case of Bill, his bees were directly contaminated. It sounds as if the spray went right over and got right into the hives. I'm hoping that didn't happen, but I have no proof.

Mr. Bev Shipley: I'm wondering two things. There is the EPA report. What are the American producers doing?

Mr. Scarlett, I'm wondering if you've had a conversation yet with the Canadian Honey Council about your dilemma in terms of trying to help deal with this. Has that happened, or at this stage are you trying to put your heads around what's happening?

Mr. Davis Bryans: We've had more contact with the EPA than we've had with the Canadian Honey Council. The Americans want to talk to us. They're calling us asking us what's going on.

Mr. Bev Shipley: Have they had discussions with the plant breeders? The Americans would be a lot larger in terms of.... I'm wondering if they've yet had any discussion with the plant breeders of corn. They stack a number of issues within corn and the breeding of it. I'm wondering, have they had contact with the plant breeders about this concern? Does anyone know? Would you know that, Mr. Scarlett?

Mr. Rod Scarlett: I do not.

Mr. Bev Shipley: Following a little bit on Mr. Valeriote's concern, the plant breeders need to understand that there's a big problem. I'm wondering what happened in Quebec after last year, where there was some documentation. What has happened in Quebec this year? Did they just plant the same corn? Have you heard anything from those producers?

● (1615)

Mr. Davis Bryans: I just found out about Quebec over the last few days, so I haven't. They might still be planting. They must still be planting, so—

Mr. Bev Shipley: I'm not sure. Some of my Quebec colleagues may know, but I think pretty much the corn is all in now. Likely the IP beans would not have any inoculant or any treatment on them. It may be another bean that is not IP that would have that, but I'm not sure.

Mr. David Schuit: My understanding is that they do have it. The gentleman I was talking to chose not to have the chemical on his seeds.

An amazing thing, too, is that my farm is certified organic and 90% of my hives are dead. How is that possible? My neighbour is organic. The guy across the road is organic. The farm to the left of me isn't. Behind the Beatty Saugeen River you have the bush. Several hundred acres there are planted in corn. East of me is planted in corn. I'm the centre of the organic, and my bees are dying.

We sent boxes of samples to the lab. It's ridiculous. They say to document it. We have so many pictures it's unbelievable.

Mr. Bev Shipley: Where did you send them, to what lab?

Mr. David Schuit: The federal.... They went to Guelph, and from Guelph they went to Ottawa, I think. Yes, they're federal inspectors.

Mr. Bev Shipley: Have you used any private labs to get, you could call it, a second opinion, or another avenue?

Mr. Davis Bryans: We kind of have a problem with that because I think most of those private labs are owned by these big corporations that developed this product. That's what happening in the United States.

Mr. Bev Shipley: The independent labs? Are there not—

Mr. Davis Bryans: Most of the labs are owned by Monsanto, Syngenta, Bayer. They're all owned by those companies so how are you going to get a fair assessment of it? You need a government-run one that's not connected with it.

Mr. Bev Shipley: When the folks from the U.S. are calling you, what are they doing in terms of testing? Is it the same over there in terms of their concern of having a private lab compared to the public government-run labs?

Mr. David Schuit: If I may say something, I understand that the biggest research lab in the United States has been bought out by Bayer. I would say that's a nice way for a fox to keep the hens in the house. It's sad.

This is why people told me, forget about it. Just quit beekeeping and get out of it. Just get out of it, Dave. These boys have too much money and you're just not going to succeed. So I am really surprised we're here today, I really am, Mr. Miller. I just appreciate your letting us come and tell you our troubles. I'm amazed, I really am.

I would appreciate it if you can follow up and help us.

The Chair: Thank you very much.

We'll now move to Mr. Atamanenko, for five minutes.

Mr. Bev Shipley: Mr. Chair, Mr. Ferguson just has a quick comment.

The Chair: Okay.

Mr. Bill Ferguson: I just have a quick comment about the poison that is on soybeans. We have an instance where the farmer was putting it in his seeder and spilled some and he doesn't have any pigeons on his farm anymore. That's the end of them. So the stuff is fairly potent not only to insects but to warm-blooded animals, too.

The Chair: Thank you.

Mr. Atamanenko, for five minutes.

Mr. Alex Atamanenko (British Columbia Southern Interior, NDP): Thanks to all of you for coming here.

Also, a special thanks to you, Larry, for making this possible.

I've been on this committee for over six years now and I haven't really heard many more gut-wrenching stories than what you folks are saying today. Clearly this is serious. This is a crisis situation.

Based just on what you folks are saying, we need some kind of a stop or a moratorium until we can independently assess what's going on here. Obviously there appears to be a correlation between the planting of corn and the dead bees, from what you're saying. So there needs to be something undertaken quickly and not just a study put on a shelf somewhere.

I know that nine years ago the U.S. EPA scientists demanded a field study on the potential harm of clothianidin to honeybees. They still don't have action. As a matter of fact, now there are one million Americans filing a legal petition to try to get some action there.

But I just want to see if I understand correctly. This is what I have from this document.

> Neonicotinoids are systemic pesticides in which the insecticide is first applied as a seed-coating at planting; the poison is taken up inside the growing plant, perfusing the entire structure of leaves, stem, flower and fruit; it is also expressed in the pollen and nectar. Bees are poisoned as they harvest the pollen and nectar to take back to the hive.

That would happen later. But what you're saying, and also here in recent research in a journal it says that, “the threat of these pesticides through a previously undocumented exposure”—that is the seed planter exhaust, which could explain why this is happening—“the mixture of waste-talc-dust and pesticide which is accidentally expelled into the air as automated planters place neonicotinoid-treated seeds into the ground.”

If that's true, that would be the reason, obviously, why the bees would be dying.

I would just like to have some further comments from you folks on what you feel, specifically, we should be doing. It seems to me we should be placing an immediate moratorium on these chemicals until we get to the bottom of this.

Mr. Ferguson, if you don't mind, I'll start with you and we'll just work our way along for the remaining time. Thank you.

● (1620)

Mr. Bill Ferguson: I would definitely like to see them banned for the present until they can prove that they aren't going to be damaging.

Neonicotinoids aren't just on corn. They are on soybeans. They are used on every other crop out there that's sprayed or drenched. For potatoes, they can do the seed or whatever. It's causing a problem.

At the moment, what's happening with the corn, because of the way it's planted, is that the cloud that's coming up behind the seeders—I have a couple of pictures of that—is quite a cloud. If there's any kind of air movement, the reports we're getting say that it will drift several miles. Then it contaminates every other flowering plant in the area. You have a lethal dose that will kill the bees, or you have a sublethal dose that's going to affect their abilities in the things they do. Some of the reports I've read say that it affects the sperm count. It affects the DNA of the insects. We aren't sure what the long term is.

We were looking at about 4,000 queens to sell to beekeepers across Canada and the U.S. We'd be able to mark them up, especially for the U.S., because they want a queen that's winter hardy and is gentle and isn't connected to the Africanized bee. We've had that. Now we are concerned about what's going to happen to our operation. It went from about 1,000 hives down to 350. To produce queens was a different type of income, as we looked at retirement and seeing as some of our family wanted to carry on in that line.

We're not sure where that's going to leave us.

Mr. Alex Atamanenko: Thank you.

Mr. Bryans.

Mr. Davis Bryans: This spring, when my son was going out to take the bees out from the winter packaging, that's when they discovered the bees. The bees were going out healthy in the morning. You could tell, because their legs were covered with pollen. I have pictures here of them lying on the ground in front of the hive. They were healthy when they went out. They gathered pollen—the pollen is still on their legs—and they're dead in front of the hives. And those are the ones that made it back. There are lots of bees that are probably dead out there. Thirty per cent of the hive died off, and that's all the foragers. When you lose your forage force, you lose your honey production that's going to feed those bees to get you to the summer. It's your pollinating source. It's everything.

It's pretty tough on your colonies to take this. We just don't know what the root of it is. We think they should just outright get rid of the neonicotinoids until something can be done about it. These other countries have seen it and know that it's a problem. Why aren't we doing something about it?

The Chair: Thank you.

We'll go to Mr. Lobb, for five minutes.

Mr. Ben Lobb (Huron—Bruce, CPC): Thank you, Mr. Chair.

I'm just wondering if someone here today could tell me the first noted date of the use of neonicotinoids on a corn or soybean seed.

● (1625)

Mr. Bill Ferguson: Do you mean this year?

Mr. Ben Lobb: No. How many years have they used neonicotinoids on corn for air seeders?

Mr. Bill Ferguson: That I couldn't tell you. I know that it's been used for quite a few years, but it is being used on more and more seeds now it seems.

Mr. Ben Lobb: There are a lot more air seeders around than there have ever been. They're more popular.

Mr. Bill Ferguson: Our neighbour, Reiger, said that probably 90% of the corn is planted with air seeders now.

Mr. Ben Lobb: Right, yes.

Mr. Davis Bryans: Corn is quite in demand. The price is high. A lot of ground that was normally pasture or hay fields was worked up and planted in corn this year, so there's a lot more acreage in corn.

What he's buying isn't explained to the farmer. They just say, “You know, if you get this on it, you're going to get another bushel to the acre”. They don't tell him that it's going to kill the bees. They're selling this poison, but they don't tell them. They're saying that for $5, you're going to get another bushel to the acre. Farmers aren't even aware that they're buying this product.

Mr. Ben Lobb: Spraying herbicides and pesticides on any crop is obviously nothing new. What's the difference between the analysis you did maybe five, six, or 10 years ago versus today? They've been using pesticides for years. What's the difference between the older data versus the newer data you have now?

Mr. Bill Ferguson: It would appear that the new pesticides are much more potent, and we did have trouble with Furadan in the past in sweet corn areas. Even though Furadan was a really bad poison for us—it knocked the bees just about as bad as this stuff—it was over in a couple of days.

The poison they're using now has a shortest half-life of 107 days, and according to the research, they're finding it in the soil 18 to 19 years later. The neonicotinoids are the most easily translocated poison there is. It will translocate and flow with the subsoil moisture, so it's going to naturally flow to the lowest spots.

Mr. Ben Lobb: On the flow then, has any research been done on how far the neonicotinoid will travel in the air?

Mr. Bill Ferguson: In the air?

Mr. Ben Lobb: Yes, so if you sprayed it in one spot—

Mr. Bill Ferguson: It's not sprayed.

Mr. Ben Lobb: How far will the dust travel? Have any studies been done on that?

Mr. Davis Bryans: No, but this year was very dry in our area. When the farmers were able to get on the fields on April 18, or just a little before that, they worked them down so fine, the dust was flying from the dust of the field plus the air seeders. I don't know if they mentioned it, but they mix a talc to make the corn flow through the air seeder properly. There are different types of air seeders: high-pressure air seeders and low-pressure air seeders.

Low-pressure air seeders don't move the volumes of air that the high-pressure air seeders do, but we're the guinea pigs testing this new machinery, so I don't know what to say about....

Mr. David Schuit: They know this chemical kills bees. Why did they ban it in Europe? They don't want to get caught here.

Mr. Bill Ferguson: I have a picture of the air seeder with the dust, if you're interested.

Mr. Ben Lobb: That looks very similar to my neighbours' when they were planting their soybeans.

I'm curious. Mr. Schuit, you claim your designation is organic. How does this affect your certification? Let's say a miracle happens, and you're able to produce a little honey this year.

Mr. David Schuit: That's the thing.

The farm itself is certified organic, but I'm not claiming that the bees themselves are organic. I like putting my bees in areas where I know there will be fewer chemical sprays or pesticides. I'm always thinking my odds are better than if I put them where I know major commercial crops are planted.

What really alarms me is that I have several acres of bush around me, and my bees are still dying.

Do you want to say something?

● (1630)

Mrs. Hendrika Schuit: Yes.

We don't know how the certification is going to affect our land. We've never had the issue, but another farmer who was certified organic lost his certification, not necessarily because of the neonicotinoids, or at least not that I know of, but because of overspraying from neighbouring fields.

I believe he said he had 25 acres, right?

Mr. David Schuit: It was Roundup, and it drifted over.

Mr. Ben Lobb: Corn retailers—whether it's Novartis or Corning or whoever's out with Pioneer, Pickseed, whatever it is—has anybody from the research labs from there come out to see any of the fields or the farms that have been affected to do any of their own research?

Mr. Davis Bryans: Bayer contacted some, but we were advised not to let them because all they want to do is try to find something else wrong with your bees.

We wanted to get an independent sampling of poisons from our government. That's why we were advised not to let them come onto our property and do the sampling.

The Chair: Thank you.

For clarification, you're talking about certification and what have you. You talked about guys spraying too closely and spray drifting over.

Bees leave your property, obviously, and if somebody's planting Roundup corn or Roundup soybeans or whatever someplace, how does that affect certification? Would that not affect it also?

Mrs. Hendrika Schuit: As far as the bees, you mean? Our bees are not certified organic.

The Chair: No, but say they were. Would that...?

Mrs. Hendrika Schuit: I would think it would.

The Chair: Okay. I think it's important to—

Mr. Davis Bryans: I have a comment on it. There's no organic in North America right now with all the Roundup Ready stuff. I don't think it's possible because the bees will fly five miles.

The Chair: Okay.

Mr. Davis Bryans: There might be an area in a bush somewhere that's isolated, but in most areas that are cropped, I don't think it's even possible.

The Chair: That was my point. I thought it was the same thing, regardless of whether you're spraying—

Mr. Davis Bryans: We try to work with our farmers.

The Chair: Of course.

Mr. Davis Bryans: We have a hundred different locations that have bees. They're all on different farms. We're not against the farmers. We try to talk to them, and they try to work with us.

The Chair: Right. Okay.

Ms. Raynault, five minutes.

[*Translation*]

Ms. Francine Raynault (Joliette, NDP): Thank you, Mr. Chair.

My question is for Mr. Bryans.

These are serious allegations, whether they are about the companies themselves or the government's negligence.

Do you foresee any legal recourse against the companies for the loss of your bees? Have the manufacturers of these chemicals tested them at all? Have the products been tested to see whether they are likely to kill bees or other kinds of animals in nature?

[*English*]

Mr. Davis Bryans: They did do some testing. The only test I know that they did was in New Brunswick years ago. It was used on potatoes. The beekeepers in New Brunswick were having a lot of problems.

They hired a couple of researchers to do it, and they did a three-month study. Those bees were having trouble in New Brunswick. They couldn't overwinter the bees. It might have been Prince Edward Island; I'm not sure exactly.

In the other area, they couldn't overwinter the bees properly. They did the research, and it took them three months. They started in the spring and they finished in the fall. They started with new equipment. After the fall, they were done, but they never followed through for another year to see if there was an impact over winter on those bees.

I had an area that was growing potatoes, and I was getting losses. I knew this chemical was there. It was only one field. My only alternative was to move my bees away from that area, and I didn't go back. That's how I stayed away from it.

With corn, you can't do that. It's too much. There are too many acres. You move it here, and there's somebody else over there. There are no free areas.

● (1635)

[*Translation*]

Ms. Francine Raynault: I think I remember seeing an item about this on *La semaine verte* a while ago.

With canola, the coefficient of dependence of bees is said to be 18%. So bees contribute more than $1 billion in canola production alone. Does this mean that the economic benefits of all other products, especially fruits and vegetables, could be largely destroyed in Canada? Could we no longer have any apples, cucumbers or any other kinds of the fruits and vegetables we need to feed ourselves?

Why do they continue to coat these seeds if it causes problems for the entire honey industry? Who are we going to buy honey from if you cannot produce it any more?

That question goes to anyone.

[*English*]

Mr. Bill Ferguson: Well, we see that the canola is affected. There are benefits from pollination. Even soybeans benefit from pollination. The research from Guelph shows that it runs from 7% to 10%; even a 7% to 10% increase in your crop can be sizeable.

We still don't want to see this product going on.

Does that—

[*Translation*]

Ms. Francine Raynault: If the bees are dying because of this product, other animals can too. What is the impact on human health?

[*English*]

Mr. Bill Ferguson: I have a report here. I only printed one off because I just found it. It's from the EPA and it's 108 pages, which tells all the problems that are going on with other things. It affects warm-blooded animals. They did some studies on rabbits, and they have premature births. They have fewer lobes in their lungs, and it causes some other problems. To read 108 pages right away and digest it all.... I picked out just the things I could see.

But to look at what they've done, and they are showing how deadly it is with bees. If it pleases you, I can read a couple of paragraphs. Would that be fine?

[*Translation*]

Ms. Francine Raynault: Yes.

[*English*]

The Chair: How much is there to read, Mr. Ferguson?

Mr. Bill Ferguson: I'm not going to read the whole thing.

The Chair: No, but how much?

Mr. Bill Ferguson: It would probably take about a minute to go through.

The Chair: Okay, a minute's fine.

Mr. Bill Ferguson: It's page 11 in the report, and it says:

> Clothianidin's—
>
> —which is part of the neonicotinoids—
>
> major risk concern is to nontarget insects (that is, honey bees). Clothianidin is a neonicotinoid insecticide that is both persistent and systemic. Acute toxicity studies to honey bees show that clothianidin is highly toxic on both a contact and an oral basis.

It goes on to explain the percentages and the rest of it.

Just as a comment, I was thinking that they sprayed around us, and I see the blossoms that are coming out and the drift that's gone over the yard. My wife likes birds, so we have quite a bird feeder outside, so it isn't only affecting the seeds and everything else. I was watching the hummingbirds, and as the season progresses, they're going to start feeding on the other flowering plants that are affected. Who's going to find a dead hummingbird? That's what I was thinking.

One of the other things this study shows is that in some of the birds they tested, it also thins the shell. So we're back to the DDT conditions that we had several years ago when it was banned.

● (1640)

The Chair: Mr. Schuit.

Mr. David Schuit: From our own experience, we're blessed with seven children.

When we had all this corn planting.... We're thinking, “Is it linked?” I don't know, but two of my kids had pounding, sore heads. Three of my children have clusters of hair coming out of their heads. My boy, who is 17 years old, gets mad at his sister, and says, “Why is your hair all over?” We say, “Jonathan, it's your hair. Look, it's all over the place.”

I don't.... This is the first time I've talked about it, but this is.... I don't know.

The Chair: Okay, time is up, but on that, Mr. Schuit—

Mr. David Schuit: I don't know that they're....

The Chair: —I was going to ask some of this stuff at the end after all the witnesses.

But, stuff like that, I mean, we don't know that it's this product. I'm not doubting it; I'm just saying.... So I would advise you to visit your doctor. Take your son to the doctor and find out, and then verify that. Because whatever this is, we have to make sure that the results are science-based, science-proven, not just suspicion. So I'll leave it at that.

Mr. David Schuit: Exactly right.

The Chair: Okay.

Mr. Lemieux.

Mr. Pierre Lemieux: Thanks, Chair.

I wanted to take just a few moments to explain a few things that I've been looking into as I've been listening to us talk about this problem. Certainly there's no issue there—that the operators of beehives, beekeepers, face challenges. It's not the first year. It's been over a number of years.

One thing I wanted the committee members to know, in particular, is that there is research being done. You had mentioned a researcher up in Beaverlodge, which is right. Absolutely, there's a fellow there. One of his areas of expertise is the management and detection of honeybee diseases. This is one of the things that he would be knowledgeable about.

I also want you to know, in case you might not know, he is a member of the World Organization for Animal Health on honeybee pathology, so looking at what it is that causes the death of honeybees. He's also a member of the national steering committee of the pesticide risk reduction program for the Canadian honeybee industry. That's very focused. There's a national steering committee on the Canadian honeybee industry, looking at risk reduction programs for that. So that's what he's involved with.

In addition to that, there are a number of projects that have been funded. By the list I have, about 35 projects have been funded, to about $3.5 million, looking at all aspects of beekeeping and what's happening to bees. What's interesting is that there are provincial beekeeping associations that have had projects funded, so for example, Quebec, B.C., Manitoba, Nova Scotia, Ontario, Saskatchewan, New Brunswick, P.E.I. They've all put in for funding and have had projects approved, and some of them are for quite high amounts, like $400,000, or $350,000. They are not all small amounts.

There have also been other associations, the ones who'd be interested in the pollination offered by bees. For example, there is New Brunswick Blueberries, Seeds of Diversity of Canada, Bay Organics, Saskatchewan Alfalfa Seed Producers Development Commission. Universities are involved, like the University of B.C. and Acadia University, as well.

Anyway, I just wanted to let my colleagues know, in particular, and to let you know in case you weren't aware. There is research being done. There are projects being funded, and they are across the country. In the one sense, it is advantageous because there may be regional types of influences. Of course, there may also be larger influences, but there are many different players involved in the research here.

The other comment I wanted to spend a moment addressing was about the programming. David, I think you had mentioned there's no programming available. I wanted to give you some assurance that there is programming available. I think the first is AgriInvest. This is a federally and provincially shared program, where you are able to invest a dollar and the government matches it with a dollar. There are limits to what you can invest. Basically the first, I believe, 15% of loss is covered by AgriInvest, where we match your contributions dollar for dollar. So AgriInvest is definitely a program, and you get to make the call on when you think you need to use or access this money.

The second program is AgriStability. AgriStability is not based on what's affecting your business. It's just based on your business revenues. So there are tax returns that are necessary to be filed. We've heard a lot about AgriStability. I do want you to know that when there's a drop in how well your farm is doing financially—and it can be based on a number of different factors—if the loss is large enough, AgriStability is there to help you and other farmers, not just beekeepers but other farmers as well.

At the provincial level there's a honey insurance program. There has not been a lot of participation, to the best of my knowledge. It's not run by us. It's a provincial program, so I can't give you details on that. There is Agricorp in Ontario. Agricorp is the organization that manages the honey insurance program. Then there's RMP. My understanding as well is that beekeepers are eligible for RMP, which is the risk management program. This would also be managed by Agricorp. Again, the risk management program is an Ontario program. It's not a federal program. It's not a cost-share program. But it is a program that is production based as opposed to being margin based, like AgriStability is.

● (1645)

So anyway I just wanted to cover some of this ground. In no way is it meant to diminish the challenges that you're facing. It's simply meant to provide information that you may not have had. My experience has been oftentimes farmers are very focused on what's going on right there on their farm. They have their families as well, and sometimes it's harder to see what kind of programing might be out there. I'll be the first to admit that going to government websites is not always easy. Whenever I've gone to a government website, I get turned around, so I can imagine how easy it is to not find what you're looking for on a government website.

Mr. Frank Valeriote: Point of order, Mr. Chair.

Mr. Lemieux made reference to a number of programs, and I don't mean the business risk management, I'm talking about all the research that's being done.

Mr. Pierre Lemieux: Yes.

Mr. Frank Valeriote: Can you tell us whether it's specific to this issue or just general research?

Mr. Pierre Lemieux: Yes. I can give you—

Mr. Frank Valeriote: He's implying that it is specific to this research, which is the issue before us, when it may not be and I don't want there to be any misunderstanding or any misleading statements.

The Chair: It's not a point of order, but if Mr. Lemieux wants to answer....

Mr. Pierre Lemieux: It's not a point of order, but a lot of these projects have to do with the sustainability of bees.

“Nutritional value and pesticide content of pollen collected by commercial honey bees”, that's the Nova Scotia Beekeepers' Association. “Bee-vectoring Technology...beneficial fungal agents to promote the health, quality and productivity of the bee pollinated crops...”.

I'm telling you—you can look at the list after—there's a list here of different projects. They do focus on a lot of the different aspects of beekeeping and what bees do, but also on the survivability and the threats to bees.

I wanted to ask a question about...or is that it?

The Chair: Well, you're actually way over.

Mr. Pierre Lemieux: Okay, that's fine.

The Chair: Mr. Schuit had a comment that he wanted to make.

Mr. David Schuit: Okay, if I could have a quick question. Those programs, do they also cover when your bees have died because of chemicals?

Mr. Pierre Lemieux: Yes. What I was explaining was that.... For example, AgriInvest, it doesn't have to do with how your bees are dying; it has to do with you contributing to the program. The government matches it by $1, and if the revenue of your farm operation drops, whether it's pesticides or other reasons, you should be able to use that money to cover some of the losses. It's the same with AgriStability. It's looking at the margins and the revenues of your farm, not so much at what it is that has caused that.

Mr. Davis Bryans: But it only covers what you earned on the income before. That doesn't really cover the expense of the equipment and everything else that you're losing out of this.

Mr. Pierre Lemieux: No, that's right. Some of the programs—

Mr. Davis Bryans: You're going to lose a lot of equipment. It's the same with crop insurance. Bill called his crop insurance guy this year because he was aware he might have a problem, and he said, "You've had a problem with sprays? You're not eligible for crop insurance this year."

Mr. Pierre Lemieux: Well as I said, the AgriInvest and AgriStability don't concern themselves with that. They're more focused on revenue.

● (1650)

Mr. Davis Bryans: A band-aid is what they are. They're not really —

Mr. Pierre Lemieux: They're not going to solve why the bees are dying. They won't solve that. In the meantime, if you're going through difficult financial times as a result of that, that's what the programs are there for.

Mr. Davis Bryans: But once you draw from them, there's nothing left.

Mr. Pierre Lemieux: Pardon me?

Mr. Davis Bryans: Once you draw from it, there's nothing left for the next year. What happens to the next year?

Mr. Pierre Lemieux: The programs are meant to provide financial assistance to farmers that find themselves in difficult circumstances, due to circumstances that are beyond their control. I'm not saying it's going to fix all of your problems or that it is going to find out exactly why bees are dying. The research will focus on that.

But these types of programs are there to help farmers—

Mr. Davis Bryans: A lot of this research you're talking about has nothing to do with this insecticide poisoning.

Mr. Pierre Lemieux: I'm sorry, I disagree. I've been reading through the different projects that have been launched. As I say, some of them are for substantial amounts of money, and they are touching on or they are focused on survivability of bees.

Mr. Davis Bryans: And they meant to neonicotinoids?

The Chair: Okay, we're not going to debate this back and forth.

I think to our witnesses, Mr. Lemieux has mentioned some programs and some of them will cover disasters, whether they're tornadoes.... One went through Grey and Bruce county here a couple of summers ago, and that money helped out. It will cover things like flooding or drought. I'm not sure whether this would qualify, but it probably has the potential to qualify under one of those. I think rather than debate it, at least investigate to see if those programs will help in the interim. And I think we need further study into why the bees, themselves, are dying.

Ms. Brosseau, you have five minutes please.

Ms. Ruth Ellen Brosseau (Berthier—Maskinongé, NDP): God bless the Internet and iPads because I did a quick little Google search and I found that on May 25, 2007, the Minister of Agriculture for Canada and the Canadian Wheat Board gave $136,000 to two projects that were supposed to address the unexplained losses of the bee population.

I was just wondering if we could get information to see where those projects or those reports are. That's just an idea.

Mr. Bill Ferguson, if it's possible, could you please table that report to the committee so we could have a chance to read it?

The Chair: That report is 100 pages and in order for it to be tabled before the whole committee, it has to be in both languages.

Ms. Ruth Ellen Brosseau: Okay.

The Chair: That's going to be, I'd just say, impossible to do. I'm sure that online someplace that report is probably available in both languages. Would that be fair or not?

Ms. Ruth Ellen Brosseau: Could it be given to the clerk?

The Chair: It could be but all I'm saying is that once it comes to the clerk, in order for him to distribute it to all members, it's supposed to be translated, which is a huge cost.

Ms. Ruth Ellen Brosseau: Is it available online?

Mr. Bill Ferguson: Yes, it's available online.

Ms. Ruth Ellen Brosseau: Could we get the information for the link? Then it could be circulated and we could look at it on our computers in the office.

Mr. Bill Ferguson: If I get who I am to send the link to, I can do that.

Ms. Ruth Ellen Brosseau: Thank you, it's the clerk.

I want to thank you for sharing your stories with us. I can't imagine what you're going through. It's heartbreaking. I was almost in tears listening to your story, and I'm really sorry.

What do you want us to do? I'm really thankful that you're here and you're educating us and sharing your difficult time, but what do you advise the federal government to do? What do you want to see happen? What do you want to see come from this meeting?

Mr. David Schuit: We want to see this chemical banned. I have difficulty saying the name. It's so long—neonicotinoids. We want to see it banned. We really do.

Ms. Ruth Ellen Brosseau: I think we have a consensus that we want to see it banned.

Mr. David Schuit: We want to see it banned like it is in Europe.

Ms. Ruth Ellen Brosseau: I think there needs to be more research. Would you suggest that we have a one-year moratorium to see what would happen in a year? If we didn't use it, what would happen to your farms and what would happen to your bees? Would they be healthy again?

I think it's just absolutely terrifying to have all these bees dying. It's affecting them, it's affecting other animals and birds, and you're saying your children are sick, too.

Mr. David Schuit: They know what it's doing. They don't want us here today. They don't want you to know. If the chemical is banned in Europe, they know. There's too much money in it. I don't have the money to fight them.

Ms. Ruth Ellen Brosseau: Yes, money talks sometimes, and it's sad.

Mr. David Schuit: It's sad to say, yes.

Ms. Ruth Ellen Brosseau: It's great that you're here sharing your story.

Mr. David Schuit: We thank you.

Ms. Ruth Ellen Brosseau: If there is anything else you would like to add, to say to the committee, please go ahead. I don't have any more questions.

Is there a consensus that a one-year moratorium would be a good idea, and do you call for the government to put a one-year moratorium on this?

Mr. David Schuit: It would be a good start.

Ms. Ruth Ellen Brosseau: So everybody agrees that a one-year moratorium would be a good start. And investing in research, 100% research from the federal government...?

● (1655)

Mrs. Hendrika Schuit: Yes, a one-year moratorium is great, but if there is an effect on the equipment, such as the frames, the wax, and everything.... If the chemical is in the wax—

Ms. Ruth Ellen Brosseau: That's right. There would be costs attributed because it got contaminated, right?

Mrs. Hendrika Schuit: That's correct.

Ms. Ruth Ellen Brosseau: Your land has been contaminated.

Mrs. Hendrika Schuit: That's right. Well, it's the equipment mainly.

Mr. David Schuit: If I can give you a quick story, if you don't mind, Mr. Miller. We sell all our honey at markets. We go to three different markets. We take great pride in selling something from a family operation. We go to Keady Market, we go to St. Jacobs Market, and we go to Kitchener Market. We're family run.

Now we had a recall on our honey and it was really alarming, but that honey was all gone. It had already been bought. It was just over the margin. Now, this was in August—

The Chair: Can you explain? What do you mean by "over the margin"?

Mr. David Schuit: You're allowed so much.... I don't have the documentation here with me right now, but I'm just giving you a bit of history here. What happened was that it was a chemical that's used in pigs and animals—hormones to make them grow faster. I just don't remember the name right now. Anyway, they had a recall of my honey, but that honey was already sold. When they took the sample, it was already gone.

They took samples of other barrels of my honey and it was all okay, and we were just over 0.2. You're allowed some in your honey, but the thing is that I could see where those barrels came from. There's a huge pig farmer and he went out and spread his manure in August, and it was so dry that the bees were thirsty and they took some of this liquid, and they ended up putting this into the honey. That's the only thing I can think of.

So it's hard.

The Chair: Just again to clarify—if you don't mind, Ms. Brosseau—when you say it went over by 0.2, you meant in order to qualify as organic?

Mr. David Schuit: No. It's a basic legal limit you can have in your honey.

The Chair: Okay. Is this stuff tested regularly for that?

Mr. David Schuit: Basically, because I work for OMAFRA, they often train their workers on me. They always take samples and they train them. They have to go all through the summer with students to take samples, so my honey is regularly checked more than a lot of peoples' honey. That was just as an interesting point I just shared with you.

The Chair: Okay.

Ms. Ruth Ellen Brosseau: I just have a quick question. Where are your farms? Are they all in Ontario?

Mr. David Schuit: We're from Hanover.

Mr. Davis Bryans: We're in Lambton, Middlesex, Elgin, Kent.

Mr. Bill Ferguson: We're mainly in Huron county now.

Ms. Ruth Ellen Brosseau: Okay.

Rod, how are you doing?

Mr. Rod Scarlett: Fine.

Ms. Ruth Ellen Brosseau: Is there anything you would like to add? I feel like you're neglected.

Mr. Rod Scarlett: No, I am not neglected. This acute incident has happened to those three beekeepers. They are the ones who are experts on it.

The only comment I would have is that the programs that were mentioned—AgriStability and a couple of others—are not well suited for beekeeping, mainly because, as these gentlemen know, you go up and down in numbers of hives depending on the year. Those programs are not well suited for beekeeping.

In my initial statement, I mentioned that perhaps it would be good for the government to at least investigate a program that is a little better suited for beekeeping, or have a redesigned program so that for events like this, which could occur and have occurred in the past, there is a backstop.

Ms. Ruth Ellen Brosseau: You are basically advising for the government to have more programs suited for beekeepers and their farms, and also perhaps more research done?

Mr. Rod Scarlett: Definitely more research. We're trying to develop a database of our bee health in Canada. We need the government to help us facilitate that. Certainly, we're going to be using Beaverlodge and Dr. Pernal, who was mentioned and who is an expert in this. That's a very key major component in our [*Technical difficulty—Editor*]ability of the honeybee industry, and the bee, pollen, pollinators, and honey industries.

● (1700)

The Chair: Okay, thank you very much.

Mr. Zimmer.

Mr. Bob Zimmer (Prince George—Peace River, CPC): Thanks to all of you for coming.

I think a lot of our consumers of our agri-goods don't really fully understand how much bees are a part of our food chain. A lot of us get it because we are on the agriculture committee. I guess we empathize with your concerns. We see them as definitely valid concerns as well. We're taking it seriously.

What I would like to comment on is that it seems to be there are assumptions made that this particular chemical is causing this effect. I guess what I would like to see is a more substantive answer to that, as opposed to “we think it's this that is doing this”. For me, unless we know it is that, then I don't even want to mention it in the same sentence because it's a false accusation. I'm not saying that's what it is, but I'm saying what we need to do is get to the bottom of it and to make sure we are fixing the right thing. Again, this study that was out.... I'm a fairly new member of the agriculture committee. I have been here about a year, but I would be happy to start looking into that study and taking it a little bit further than that.

I did have a question. I will start off with Rod. I am from the west. I am from the B.C. Peace River area. I just had a question in terms of beekeepers in general. Have there been significant losses in the past? I still remember 20 years ago I was a kid out on a farm, and I remember the bees that were there—there were quite a bit on the ground that had obviously died through the winter or whatever it was. I have seen that before many years ago. I don't know what caused it. Have there been losses in the past? What has caused that loss, if you can answer that, Rod?

Mr. Rod Scarlett: There certainly have been instances of acute bee losses. That's a little bit different from the systemic bee losses that I was talking about in my preamble. Our winer mortality rates running at 30% for the last five or six years—that's a little bit different from the acute events. There have been acute events in Alberta and B.C. that have occurred in the past—one-year events in regions.

Mr. Bob Zimmer: So that's as opposed to this, where it seems like a systemic issue and over the years it's remaining as a loss for you.

Have you seen any losses similar to this, though, where over the years it has been a steady decline in numbers? Have you seen anything like this in the past?

Mr. Rod Scarlett: This is unique to the Canadian bee industry over the course of the last five, six, seven years. It's a result of a number of different factors, of course. I don't think we can pinpoint any one. A lot of the research indicates it's a combination of a number of things.

Mr. Bob Zimmer: Would you mind alluding to what you think those issues are?

Mr. Rod Scarlett: It could be pathogens. It could be environmental causes. It could be varroa, of course, the mites, or nosema. It could be management practices. It could be how beekeepers offer the treatments at different times and it has different impacts. And, of course, it could be winter.

Mr. Bob Zimmer: Right. In asking that, what I wanted was to get to the bottom of...and I think most of us do here. I think without exception everybody in this committee is concerned about the fate of bees. I would just like to find out what the problem is, and then accurately get to the bottom of it. I would argue that none of us would argue against finding a solution to that.

Thanks.

That's all my time, Chair. That's all I need.

The Chair: You still have some time.

Mr. Ferguson, you wanted to make a comment?

Mr. Bill Ferguson: There has been a study. It has been tested in Ontario, and they know for a fact that 28 out of 37 samples were affected by clothianidin, and they were doing more studies to see what was involved with the other samples. So there's a fact in that.

● (1705)

Mr. Bob Zimmer: Do you know what study that is so we can—

Mr. Bill Ferguson: CFIA just gave that out.

Mr. Bob Zimmer: Okay, that's the study that was referred to earlier?

Mr. Bill Ferguson: No. I'm not sure where that one is. We're just getting reports back—

Mr. Bob Zimmer: If you can name the study, that would be nice for us to be able to check into.

Mr. Davis Bryans: I just got the results back from my tests today. My wife sent them to me.

Mr. Bob Zimmer: I think I'm done on time, but do you have the name of that study? It's a CFIA study, though, is that correct?

Mr. Bill Ferguson: No, it's actual testing from the bees that have been killed in Ontario. It's the results of the—

Mr. Davis Bryans: It's Health Canada, "Re: Bee Incident Sampling Results - 2012".

Mr. Bob Zimmer: But, again, just because a certain item is present on a bee doesn't mean it necessarily killed it. That's what I'm saying. I think what we need to see, though, is that there's a cause and effect here.

Mr. Bill Ferguson: Yes, they were poisoned with an overdose and they died.

Mr. Bob Zimmer: Is that what the study states or is that your opinion?

Mr. Bill Ferguson: Well, they know it takes two nanograms to kill them. From one of the other studies I read—I think it was the EPA—they were finding it higher than that on them.

Mr. Bob Zimmer: If a report can be filed that we can have a look at that has that cause and effect to it, then we'd be definitely interested in seeing it.

Mr. David Schuit: Who do we send it to?

The Chair: Larry Miller, or you can get all the members of committee and send it to them as well, for information.

But Mr. Bryans, you were in the process of saying you got the results of what killed your bees. Isn't that what you were saying?

Mr. Davis Bryans: It just says right here, "Clothianidin is known to be toxic to bees, however, a number of other factors must still be considered before a final conclusion". So they're still....

The Chair: It's not conclusive.

Mr. Davis Bryans: Yes.

Mr. Bob Zimmer: They're still finalizing that study, I guess.

Mr. Davis Bryans: I just got that today.

Mr. Bob Zimmer: If you would, it would be for the benefit of us in the committee if you would pass that along to us when it's complete, because I think it's important that we treat it as specifically as possible and get to the bottom of it.

Mr. Davis Bryans: I'd like to know when this might be completed. How are we going to rush this process?

Mr. Bob Zimmer: I don't know. This is the first time I've that heard that this study was even being performed. I just want to know, bottom line—

Mr. Davis Bryans: It was a test from Health Canada. They tested our samples.

Mr. Bob Zimmer: But you just said there are still other issues that couldn't be excluded yet.

Mr. Davis Bryans: Yes, they tested for the poisons that were on the seed. They found that clothianidin was on the bees and on the corn, the same stuff.

Mr. Bob Zimmer: It is important for our committee to see that there is a deliberate cause and effect. We need CFIA, or whoever it is, to give us that data.

The Chair: Thanks, Mr. Zimmer.

Just in closing, further to my question or comment before, you referred to it being banned in Europe. I certainly need to know, and probably everybody on the committee would like to know, did they ban it over there because they found it to be the cause? I don't doubt that something like this is killing the bees. It is probably exactly what you are saying, but no matter what you do, it has to be based on science.

Mr. Bryans, your report on the bees that you had sampled came back not conclusive, and that doesn't help your case. I'm being the devil's advocate—

Mr. Davis Bryans: I want to be honest with you, too.

The Chair: Of course, I know you do. I appreciate that, and I'm sure everybody here does.

You can't react on suspicion. I don't doubt what you say is probably true, but it has to be based on science. I think that sometimes takes a lot longer than any of us likes, but I would suggest that your organizations—your Canadian group that Mr. Scarlett belongs to, whatever avenue—push for that testing and when you have conclusive results.... I'm not saying what should be done at that point, but at least you have something you can bring forward.

With that, I'd like to thank all of you for coming.

Mr. Scarlett, thanks for joining us by video conference. To the rest of you, thank you very much for coming to Ottawa. We appreciate that.

● (1710)

Mr. David Schuit: Thank you.

The Chair: Committee members, I have a budget to deal with today's witnesses and I would engage a motion:That in relation to the losses in honey bee colonies, a proposed budget in the amount of $5,000 be adopted.

The motion is moved by Mr. Payne. Is there discussion?

(Motion agreed to)

The Chair: Thank you very much.

We will see everybody on Wednesday.

The meeting is adjourned.

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