# **HANSARD**

## **NOVA SCOTIA HOUSE OF ASSEMBLY**

**COMMITTEE** 

ON

**RESOURCES** 

Thursday, November 20, 2014

LEGISLATIVE COMMITTEES OFFICE

**Department of Agriculture Re: Strawberry Industry** 

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### **Resources Committee**

Mr. Gordon Wilson (Chairman)
Mr. Keith Irving (Vice-Chairman)
Mr. Lloyd Hines
Mr. Bill Horne
Ms. Margaret Miller
Hon. Alfie MacLeod
Mr. John Lohr
Hon. Sterling Belliveau
Ms. Lenore Zann

[Mr. Bill Horne was replaced by Mr. Stephen Gough] [Mr. John Lohr was replaced by Mr. Eddie Orrell]

In Attendance:

Ms. Kim Langille Legislative Committee Clerk

### WITNESSES

### **Department of Agriculture**

Mr. Ernest Walker - Director of Policy
Ms. Sally Stanford - Acting Director of Programs
Ms. Peggy Weatherbee - Manager, Programs
Ms. Karen Wong-Petrie - Acting Manager, Animal Crop Services
Mr. John Lewis - Strawberry Specialist, Perennia



# HALIFAX, THURSDAY, NOVEMBER 20, 2014

STANDING COMMITTEE ON RESOURCES

9:00 A.M.

### CHAIRMAN Mr. Gordon Wilson

MR. CHAIRMAN: Thank you everybody. I'd like to call the meeting to order. My name is Gordon Wilson. I'm the chairman of the committee and the representative for Clare-Digby. This is the Standing Committee on Resources.

First off, I'd like to thank everybody, especially the committee members, for allowing this meeting to go forward. For those who didn't realize, when the House is sitting we have a rule that this committee doesn't so we needed unanimous consent to be able to do this. I really do appreciate it in respect to our presenters that we have here. The committee will be receiving a presentation from the Department of Agriculture today regarding the strawberry industry.

I would ask the committee members to introduce themselves for the record, stating their name and riding.

[The committee members introduced themselves.]

MR. CHAIRMAN: I'd like to take this opportunity to also remind the members - and there's a real reason for this - to wait and speak until after the chairman recognizes them. These mikes do not light up like the ones in the Legislature, so for the sake of the Legislative Television people who are recording it, it is best that I recognize them and then they know which mike to turn on.

We're going to just quickly review the agenda. We will have a witness presentation. After the witness presentation and questions we will have committee business. We have some correspondence and the annual report for approval. We're hoping that we're going to wrap up around 10:35 a.m. with the presentation, if that's fine, to allow some time for questioning and committee business - no, that would include questioning, I'm sorry. That would be quite a presentation. (Laughter)

Now I would like to welcome the officials from the Department of Agriculture and ask them to introduce themselves and begin their presentation. Thank you for coming.

MR. ERNEST WALKER: Thank you, Mr. Chairman. My name is Ernest Walker, director of policy and planning with Agriculture; to my left is Sally Stanford, our director of programs and business risk management; Peggy Weatherbee is our manager of programs; John Lewis, with Perennia Food & Agriculture, is our strawberry specialist; and Karen Wong-Petrie is our manager of Animal Crop Services.

So, again, thank you for inviting us today. Peggy is going to take us through the slide deck, and then we're happy to answer any questions.

MR. CHAIRMAN: The floor is yours, Ms. Weatherbee.

MS. PEGGY WEATHERBEE: The objective here today is to give you an update on the strawberry industry and the assistance the Department of Agriculture provided.

Just to recap, what brought us here was that in 2012 the state of the industry at that point in time was we had 86 commercial growers, approximately 700 acres, with \$10 million in sales. On the nursery side, we had five growers, 300 acres, and \$9 million in export and domestic sales. It is quite a vibrant industry.

The first signs of problems came out of the Great Village area, the plants seemed to be infected, they were weak, they wilted, and they eventually died. There was a previously unknown virus complex that was confirmed early in the Fall and that was after the export sale of that nursery stock. Sales from the exported nursery plants affected were about \$3 million of sales. The effect of this complex virus is on the plants, the berries themselves are safe to eat. The Department of Agriculture has an inspection program that provides for inspection of the plants with a focus on the quality of the product.

Moving into the Fall of 2012 and the Spring of 2013 the Nova Scotia Department of Agriculture brought in an expert from the United States Department of Agriculture and he confirmed the virus complex. It is a virus complex that does live in the wild and on commercial plants and it is spread by the strawberry aphid. The recommendations coming from the specialist was to destroy all the infected plants in the Great Village area and institute an intense monitoring program to control the aphids.

The province at that time started discussions with Agriculture and Agri-Food Canada on an AgriRecovery assessment process. There were five farms in the Valley area and the Great Village area representing about 258 acres that plowed down their crops before the fruiting season. The Nova Scotia Department of Agriculture and Perennia went out and sampled all of the commercial fields looking for this virus.

Going into the summer of 2013 the monitoring program that was conducted by the Department of Agriculture and Perennia confirmed this virus complex was widespread and the industry prepared a recovery strategy. The strategy involved plowing down the fruiting acres and control of the aphids - some heavy monitoring to look at the spread and severity. They wanted to implement a virus-testing program for nursery stock and they requested a plow-down incentive for \$4.5 million.

In this time period the Nova Scotia Department of Agriculture and Agriculture and Agri-Food Canada completed their AgriRecovery assessment and that assessment, based on a per-acre cost of re-establishing some destroyed crops, recognized there could be a potential of \$2.3 million in assistance through the AgriRecovery program. The Nova Scotia Department of Agriculture also offered interest assistance on the portion of the federal advance payment loan when the producer went to replant.

If you look at what assistance was eventually given to the industry, the AgriRecovery program compensated for 420 acres and there was \$1.2 million of assistance paid out. The AgriRecovery program is a federal-provincial cost-share program, so the cost share on that is 40 per cent province, 60 per cent federal government.

The interest assistance on the advance payment program loans - we've had six farms that have participated in that. We're estimating about \$65,000 in total will be the cost of that, and that is still ongoing. Perennia and Horticulture Nova Scotia instituted a Nova Scotia aphid and disease monitoring project, and we've agreed to fund that over a three-year period at \$85,000 a year.

The other business risk management program available is crop insurance, which producers can purchase up to a 90 per cent loss coverage on the fruit production, and there is the AgriStability program, which is a whole-farm margin coverage disaster program that does offer assistance.

The inspection program - there was an existing inspection program where the Department of Agriculture facilitated a visual inspection for specific diseases and pests. That inspection team consists of two department people, two Perennia, and one plant pathologist. The virus cannot be detected through visual inspection, so it does need that further testing. The inspection program provided a tag to indicate that the lot had been inspected. Industry volunteers followed this protocol. The one thing is that government does not have the authority to order destruction under any of our Acts and regulations, so it does have to be volunteer participation in these programs.

Our inspection program was updated in 2013 with some new requirements that did include virus testing and a new tag, so we have a new colour on the tag and some new wording on that to represent the additional work that's being done.

So 2014 and going forward, this is where it's a really good news story. We take an industry that was in a crisis situation, we've done the nursery testing this year, and the vast majority of the crop was clean in 2014. We've also surveyed the commercial fields. Both viruses are still present, but both viruses have to be on the plant at the same time to create the real problem, and the viruses are at significantly lower levels than in 2013. The number of aphids in the field has been significantly reduced. Again, this is a very good news story, where we've gone from a crisis to almost a success story in a year, when we thought it would take a little longer.

Also going forward here, the Department of Agriculture and Perennia assist through this aphid monitoring, the additional testing on the nursery stock, and the testing of these commercial plantings. The current levels of infection should not reduce yields significantly. They can be managed, and the government has initiated preliminary discussions with the industry on a quality assurance program for plant protection, and we actually had a meeting on that with the industry last night, so we're moving forward in that direction.

So that is the end of the formal presentation.

MR. CHAIRMAN: Thank you very much. Were there any others of your team that wanted to say a few things before we get into the questions?

Mr. MacLeod.

HON. ALFIE MACLEOD: Thank you very much, Mr. Chairman, and I want to thank you for your presentation. One of the things that comes to mind is - you brought us up to date to where we are. What's the plan for the future? How much more testing is in the future? How many more years is the plan in place for?

MR. JOHN LEWIS: As the slide showed, we have a three-year funding commitment to continue to do the monitoring, which is very important, obviously, in optimizing the vector management. It's the strawberry aphid that spreads the viruses, so the monitoring basically identifies the high-risk periods. It's communicated to the growers by email when the high-risk period begins and when it ends, so they can really focus their efforts and not waste sprays and times unnecessarily. We've got a commitment for three years. This was the first year, so we've got 2015 and 2016. That also provides funding to do the virus-testing survey work that we've been doing, which basically measures progress. We've got inoculum levels that Peggy mentioned that have dropped very significantly from 2013 to this year, and we'll continue to do that testing to monitor our progress.

The other thing about that funding is, it's funding the virus testing of the nursery stock, so obviously with any replanting, we want to know that we're putting clean plants in the ground, so we've got two years of funding to continue that testing, as well. I think by that time we'll have our quality assurance program in place and I suspect the growers will be paying for it at that point. I think we're in good shape, in terms of the work that we need to do with the industry, for the next couple of years at least. Thank you.

MR. CHAIRMAN: Thank you. Mr. MacLeod.

MR. MACLEOD: Thank you again, Mr. Chairman. That being said, is this virus a cycle-type of a virus? Some places, when you have these kinds of issues, it happens every so many years. Is that what this is, or do we know that yet?

MR. LEWIS: That's a very good question. What we do know is that - and we didn't know it when the issue first exploded on us, if I can use that word, but we did a lot of research that first winter. We hadn't had any reported history of virus problems in strawberries in the province, so we were thinking this is a completely new issue. We started - you know, you do your literature review. In the archives at the Kentville research station we found some really good work out of the 1950s and 1960s that verified that viruses in strawberries - I won't say that they were commonplace, but they found 10 per cent levels in the commercial industry at the time - 10 per cent, 12 per cent. It was an issue. It was documented in the literature at that time.

They did some aphid monitoring in the early 1960s that showed the vector was present, but it was at very low levels at that time, like 0.1 per cent of the total aphid populations they were finding in strawberries were the vector. So we entered a clean plant program in 1956, the progenitor of our existing program, and I think it further cleaned up our stock and cleaned up virus issues. Did it eradicate them? No.

No, the alternate host, the main alternate host was wild strawberries. There are a lot of wild strawberries in this province. I think if you go out in your driveway you'll probably find some along the edges. They weren't eradicated, they were just managed and we had low levels of the vector that spreads them, so they just stayed out of sight, basically, until recently. The big question is, why did they become a problem so suddenly? There's always a lag phase where you don't know what's going on.

MR. MACLEOD: We're familiar with that in government.

MR. LEWIS: We keep referring to it as a virus but it's two viruses, and you have to have both. The plants have to be infected by both viruses before you have disease, so you can have single-virus infections and never know. Until they build up to a level where you're starting to get plants that have both, then you start to see the odd plant here and there and you're explaining it away. It's herbicide injury, or it's cyclamen mite, or something.

What we know now is that probably the levels of the two viruses started to increase around 2000, and they started building up. Again, why did that happen? I think the answer is, we're starting to see - you guys are probably sick of hearing climate change, but that's what's going on. Our climate is moderating and we're starting to see new pests that may have been here, like the strawberry aphid, but they were always managed by our climate, and they are no longer being managed and they're quite happy.

What we found and, in fact, I predicted it, based on the level of infections that we saw in the Fall of 2012 - you've got to have a lot of vector for that to happen. When we started actually looking for the strawberry aphid in the Spring, it was the dominant aphid. It went from 0.1 per cent of total catches in 1960 to 90 per cent of what we were finding on strawberries in 2013. There has been a huge shift that has happened and, of course, it explains why we found ourselves in the middle of a virus epidemic. That probably concludes my comments.

MR. CHAIRMAN: Usually we limit a question and a follow-up but it has been a while. Mr. MacLeod.

MR. MACLEOD: I do have two more questions and I'll ask them both at the same time. One is, was there any noticeable effect in Cape Breton Island on the strawberry producers that are there; and the second part of the question is, did this virus have an effect on the Nova Scotia brand on the market outside of Nova Scotia?

MR. CHAIRMAN: Mr. Lewis - I assume, Mr. Lewis, you're going to be answering most of these questions.

MR. LEWIS: I guess I've got the ones on a technical nature, and I'm sorry, I've never been accused of being brief. We've got about four commercial farms, fresh fruit producers in Cape Breton Island and certainly we've verified that the viruses are in Cape Breton Island. They're from one end of the province to the other. The levels of the two vary a lot. The two viruses are strawberry mild yellow edge virus and strawberry mottle virus is the other one.

Strawberry mild yellow edge is at much higher levels on the west end of the province and mottle is at relatively low levels and it's exactly the opposite in Cape Breton. Why that distribution varies - you know, when you get in the Annapolis Valley and in the central area, like in Truro and Great Village where we have a fair amount of strawberry production, they're roughly the same. You've got a bigger problem when they're both there together at similar levels. That's where we see most of the disease, in the Valley and in the central area of the province, less in Cape Breton because we've got a lot of one but we got a little of the other and it takes both to cause disease.

I would say in terms of disease, yes, there are some there but not nearly as bad as what we experienced in the central area and in the Valley. The same with Yarmouth and the

South Shore, less disease, there's some there, but much less disease because they don't have as much of both viruses.

We have certainly made a concerted effort. When you do this testing and you know what they're looking at, when you're doing the testing on the field we know what they're looking at in terms of virus levels, then you can basically red flag farms that have some problems. It's a great opportunity, we don't leave anybody out. They can deny us, but by and large they haven't. We know where everybody stands and we're in a much better place this year than we were last year, but it's nice. I've already identified half a dozen growers that I need to work with and so I'm able to really red flag them and have some dialogue with them about management. Basically it comes down to managing the vector, or plowing down fields that have too much inoculum in them.

The other question was a Nova Scotia brand. I think that is a challenging question. Are you referring to the fruit or are you referring to the plants because we have two sectors, obviously?

MR. MACLEOD: One farmer in Great Village exported the lot to Florida and he feels that his market fell down to around 5 per cent of what he was originally doing so I'm just curious if that has had a net effect on all the farmers and the ones who do the exporting.

MR. LEWIS: Thanks for clarifying. I would 100 per cent agree when this happens and you have two of your five nurseries that have compromised stock, this was big news down in the southeast. Florida was having big grower meetings; they were bringing all the top experts and certainly we were very aware of that and we were very concerned that we were going to lose market share. Five nurseries - their revenue was almost as much as the fresh fruit industry.

There's a lot at stake and we felt our biggest effort to regain that market share was mandatory virus testing of the stock. We worked with, really, the top expert in the States. It was the gentleman who was brought up to consult with the industry initially, but he basically worked with us to develop a statistically sound testing protocol that ensures stock is going to be disease-free. That was our main effort to sort of buy back confidence; to tell that industry the stock is tested. To my knowledge, we are the only nursery region in North America that does virus testing at generation four or certified plant level.

I went to Florida last winter - this would be the second winter after the problem with the Great Village stock - and I went down to not only see our stock, how it looked, but to talk to the growers down there and tell them what we were doing. First of all, our stock looked phenomenal. It was as good, or better than, everybody else's so that was one plus. I'm amazed actually how fast we rebounded. You're worried about everybody being painted by the same brush and I don't know if we can credit the virus testing for all the positives out of that, but three of the four nurseries that remain right now - one of the Great Village nurseries got out - but three of the four increased their acreage this year. There is a huge demand for Nova Scotia stock right now.

I have a little article out of a pretty prominent national horticulture magazine and it says: Quebec virus devastates strawberries - and this is from this year. This is two years after our big hit and it clearly identifies nurseries as their problem. This Spring - we've got a replant program and I'm encouraging growers to plow down fields and buy stock from Nova Scotia virus-tested stock. We were worried about supplying them because the demand for Nova Scotia stock was so high out of Quebec. Quebec is a much bigger industry than ours. It's like all of a sudden we're a victim of our own success.

They're very concerned about - there is no certification program in Quebec. They're in a real mess right now and I suspect the issue - the epidemic hit them at the same time it hit us; it's just that we scrambled earlier. I think we took very good logical steps. We consulted with the best people out there and we're going in the right direction right now. Are we there? There is still work to do. I think we can improve our certification program, the inspection program. We're working with the industry on that, as Peggy mentioned.

We still have some growers that we're trying to - we have some organic growers, small growers that can't afford to go buy four to five different aphicides. There are still some challenges out there, but we've made huge progress, and as I said earlier, we're looking at a normal crop next year. We went from half a crop in 2013 to about three-quarters of a crop this year - and the experts said three to five years, so we're definitely on track to beating this.

Will we eradicate it? No, not as long as there are wild strawberries in the province, but we can definitely reduce inoculum levels to where it's not a problem and manage the vector very effectively - we've proven that over the last two years.

MR. CHAIRMAN: Could we have a copy of that for the committee?

MR. LEWIS: Sure thing.

MR. CHAIRMAN: Mr. Belliveau.

HON. STERLING BELLIVEAU: I find this very interesting, your comments regarding climate change. To me, spending some time on the water, I've actually observed this in seeing how different species react. It's interesting - I guess my concern is do we have to prepare ourselves for some new types of viruses or diseases that are going to be moving in our region - are we going to be subject to that?

My concern is, first of all, to me as an ordinary person, the short period of time that you took to get in front of this, I'm amazed at that, and you actually commented on that. My observation of the strawberry industry is that it's a seasonal industry for Nova Scotia and when I go to my local supermarket I see - especially in the winter months - product brought in from long distances from our neighbours to the south. I know that is a high cost in order to get that to our markets in winter. So I guess my question is, is there room for expansion or is it simply a cost factor of expanding this particular industry to a full-time,

year-round, if you want to call it, greenhouse industry for the winter months in Nova Scotia?

MR. LEWIS: Thank you, Mr. Belliveau, for that question. It's possible, in fact when I started in 1997 our industry was all matted row, traditional matted row, and we grew short-day varieties and the harvest began usually around June 20<sup>th</sup> and we were done by July 20<sup>th</sup> - it was a one-month crop. Today we have 200 acres of plasticulture growing day-neutral strawberries. We've got what we call a waiting-bed system where you can fill little holes in the harvest period. We'll start harvesting with basically plastic technology, there are row covers that fit into that as well.

We start harvesting strawberries usually June 1<sup>st</sup>, sometimes even in May. May berries were miraculous when we first got them. Basically by the first week of June we've got berries now, and we pick strawberries now continuously into mid-October - and the goal right now is to extend it even further.

Can we use greenhouse technology? We definitely can. There's a very significant greenhouse industry in the Netherlands; they use high tunnels, Spanish tunnels, maybe you've heard, in the south of Spain. We can extend it further; we could potentially even go year-round.

There is a small greenhouse industry in Quebec. It really comes down to economics, that's the unproven variable right now - economics. Basically it's just finding the right individual who wants to start looking at it. Certainly that's what the goal is, it is season extension. We've gone from one month to four months over the last 15 years. If I could look into my crystal ball, I would say that in another five years we'll be at six months - and who knows after that.

### MR. CHAIRMAN: Mr. Irving.

MR. KEITH IRVING: I need to begin by getting a bit of technical information. I don't know very much about this industry, or biology. Can you explain to me what an aphid is and what a vector is so that I can sort of better understand the workings of all this?

MR. LEWIS: Well an aphid is an insect, in some ways a simple insect. It has two forms, a wingless form and a winged form. They colonize lots of different plants. The strawberry aphid, which is our troublemaker here, colonizes strawberries - that's its only host, and that would include wild strawberries. They will lay eggs that overwinter and when those eggs hatch they'll start building their population.

They are a sap-sucking insect. When they hatch out they don't have wings so they are stuck on that plant basically - they don't move very far, but they do multiply very quickly if the conditions are right. So they start building up that colony and when they start to get a little crowded, they disperse just like maybe humans do, to a better area where there are better resources. And the way they do that is they grow wings. These aphids only last

three or four weeks, but they can have a lot of young in that period of time and if they feel crowded or threatened by predators, they will grow wings - in a day they'll grow wings and then fly off.

If that plant is infected with both viruses, when it grows wings and flies off, it is taking both those viruses with it. It just hops from plant to plant, looking for a good new home and it is infecting, it is sampling, every step of the way. They can infect a lot of plants that way. So that's really the risk period for aphids. That's sort of aphid biology 101.

The other question was?

MR. IRVING: Vector.

MR. LEWIS: Okay, vector is definitely a term for virologists and aphid biologists, but viruses are tough in that unlike other diseases or other insect pests, including aphids, you can't spray something on the plant to kill it. It's in the plant and the only way to kill it in the plant is to kill the plant.

The way they're spread is the aphid spreads it, that's what a vector is - it's the agent that spreads the virus. There are other vectors. Aphids are just one example and with strawberries there are aphid vectors, white fly vectors that spread some other viruses. Back to Mr. Belliveau's question, can we expect other problems in the future as the climate continues to change? I think that's very possible, perhaps even probable. We've got to learn some lessons from this. It's an opportunity to learn and anticipate and prepare. There are nematodes that spread some viruses and they are all vector classes. A vector is the agent that spreads the viruses.

MR. IRVING: Thank you, that's helpful. Maybe you could tell me now a bit more about the inspection and how that process unfolds. Do we need a five-person team? Why is that, if I understand the presentation correctly? If a field is discovered infected, does that mean the whole field is infected and are adjoining fields infected? Tell me a bit about the inspection and when you find something how you determine the boundaries of that infection.

MR. LEWIS: This program has been going since 1956 and basically, in a very simple sense, it is designed to provide a reasonable assurance that the stock is strong and robust and will perform well, right? It has never been zero tolerance. There are differences in tolerance depending on the severity of the pest. For example, there are half a dozen diseases that are plant killers so viruses can arguably fit into that category. They are treated more seriously, obviously, and if we see significant levels of these plant-killing type diseases then it can become a certification issue. We won't certify the field.

For instance, this year we had one field on one of the nurseries that had verticillium wilt which is a plant killer. You find it during the inspection. Visually you see the symptoms, you verify in the lab, and then it's like how much can you tolerate? That's

maybe where it's not as quantitative as we would like. A little bit you can let go, but where's the threshold? Sometimes we really struggle with those decisions.

There are other pests that we're monitoring for. We see powdery mildew in the field, I see some botrytis in the field, I see some two-spotted spider mites - they are not plant killers. We recognize these diseases. We work with the growers to say, okay, you have high levels of this pest; you've got to bring them down.

With viruses, that presented a unique challenge to us. I want to take you back to 2012 when we had those two nurseries that had very high levels of both viruses. We did our last field inspection - up to this point in time our inspections are visual inspections so we have to see something to trigger an investigation of cause. What we didn't know is that the infection period, when these plants were getting infected, was primarily in late June through July. It only takes one of each of the viruses to infect the plant. It's a very low, low level; the plant isn't bothered by that, it has to increase in the plant. We call it the titre, the titre has to increase and it takes 10 to 12 weeks before you'd ever see any symptoms. So here we are, we're in there in early September doing our last inspection of southern stock; they're going to harvest the week after and there are no visual symptoms. I'll go to my grave - it was there. That stock looked good at that time.

Fortunately, there was a little bit of stock that wasn't harvested and sold. They're not always sold out and that year they weren't sold out. When we brought the virologist from the United States, he wanted to go look and I hadn't seen it since the inspection, quite honestly. We knew we had a problem, but I still hadn't seen what was left over. We went in - this was in mid-October - and I walked up. I didn't even go into the field. I was 50 feet away from the field and I said, what happened to that field? The symptoms were so strong. They began to express after the last inspection and there was very strong expression later. We missed it because we couldn't see the symptoms. Like Peggy said, the only solution - the only way we can absolutely know whether or not that stock is clean is by doing the virus testing.

The protocol involves taking 60 random single-leaf samples from each field block and - it may not sound like a huge number, but the mathematicians tell us that if you have zero positives in those 60 leaf samples, you have 95 per cent confidence of less than 5 per cent infection. I'll tell you, that's like a census - Angus Reid poll - but that's what the mathematicians and statisticians tell us, 95 per cent confidence of less than 5 per cent infection with that 60-leaf sampling.

We sample for the more common of the two viruses. Unfortunately, this science is really just evolving over the last five or 10 years so that made it even more challenging. One of the two viruses - the more common of the two - we've got a fairly inexpensive test for it and so we can do that 60-leaf sampling. If we have zero, it really doesn't matter if there is some of the lesser virus there because it takes both viruses to cause disease. It's unlikely that there would be because it's less common anyhow, but that's basically the crux

of the testing. It's a statistically sound, mathematically sound methodology that ensures very low levels of disease and it has worked.

We had a couple of growers at our meeting last night. The stock is the best they've ever seen. They believe - and this is something I hear across the industry - they believe it's because there is no virus. They know there is no virus in it and they're seeing the effects in the field. I'm not saying there was before. We've got no evidence of that, but apparently there is evidence in Quebec, so never say never.

It could have been a very low level that just sort of introduces it. You've got lots of vector. We've got millions of plants coming in every year and it's not just our nurseries. Day-neutral strawberries, there are 200 acres of them in the province right now and most of those plants come from California. When we're short-stocked, our nurseries will source it out of Ontario; they'll source it out of Massachusetts; they'll source it out of Quebec. Every year there's - if we could create a closed system and just use Nova Scotia virus-tested stock, I think we'd probably be in much better shape, but that's not going to happen. I hope that answers your question about what we're trying to do in the inspection program and we're trying to fill some other loopholes over the next year with the QA program.

MR. IRVING: My question: is there a team of five needed? Is there a reason that there are five going in at a time?

MR. LEWIS: We used to have eight. When I was in the Department of Agriculture there were eight. In the end, the growers are paying for it now so we don't want to have an excessive number. We do have to have certain expertise. I'll say I've got pretty good expertise in most areas, but I'm not a dedicated entomologist. I'm not a dedicated pathologist. We really need pathology expertise, so one of our team members is a plant pathologist.

We've got two members directly from the Department of Agriculture. The reason for that is the department issues the tax, so they had better have somebody overseeing the whole process to make sure that it's legit, that it's a good program. We want to have direct department participation on the team.

We've got 350 acres. We used to do a July inspection, and it was a week to do that inspection with eight. Then we do August, and then we do September. Sometimes when we go out we are missing one, we go out with four, and that's like, oh my goodness, I wish I had the fifth one. That's a minimum number, in my opinion. We've got to have a minimum of five. Hey, if we could put more people into it, it would be that much better, but that's what we're working with right now. We're trying to find some way to put some of that back on the nurseries with this QA program, and we'll do some auditing. I believe that's a minimum number, five.

MR. CHAIRMAN: Thank you, Mr. Lewis.

Mr. Orrell.

MR. EDDIE ORRELL: Thank you, Mr. Chairman. I guess when you were answering one of the questions earlier, you talked about the eradication of the virus, how it's to plow the field down. I guess I really don't know how to ask this question, but if you have a field that's full of virus and you go in to plow it down, would that spread to the next field before you got that plowed down, or would you have to keep going? If that's the case, do the plow-down or the spraying or the control that way work together or do you just do the one and hope for the best? Which would be the best, I guess is the question?

MR. LEWIS: It's a good question. A lot of our diseases are soil-borne, and growers know that. They are worried about it moving from one field to another. It could be just residue on tractor tires or on tillage equipment.

That's not the case here. It's not soil-borne. If a field of strawberries had it, it doesn't mean that the next time you go in there, the next rotation is going to have it again. So that's a positive.

Can it move from one field to another if you destroy that infected field and you've got an uninfected field beside it? It could happen, yes. Let's just assume that field is loaded with winged strawberry aphids, and you go out there and you start plowing that field. It's a disturbance, so there will be enhanced flying. They're going out in every direction. Just think of a field of crows - you go in and disturb them, they fly off in every direction. Theoretically, the same thing can happen with aphids taking the virus with them.

What we do is, when we're talking about a crop destruct, we want - when we did the first one in 2013, we had a lot of discussions about the best way to do that. It involved putting on systemic aphicide to kill any aphids that are in the field before you plow. We also even recommended herbicide to kill the strawberries before they were plowed down.

Strawberries are a perennial plant, and you go and plow them down - if you've ever gone into a field that has just been plowed, you'll see little plants in between the furrows. I've gone into fields that were in strawberries the next year, and those strawberries in those furrows have re-rooted in, so you potentially still have inoculum there. So kill the plant, spray it out with a herbicide. Herbicide is cheap. Make sure that any aphids in the field, you've killed them too, before you plow it over. It's the right way to do it, for sure. There's a right way to do it and a wrong way to do it.

MR. CHAIRMAN: Thank you. Mr. Orrell.

MR. ORRELL: I guess from that question - I know one of the growers at home. I frequent his fields quite often. He's got a couple of fields in different areas, quite a distance

away from each other. So I guess if he had it in one field, he'd not necessarily have it in the other field. Is that what you're saying?

MR. LEWIS: That's correct.

MR. ORRELL: Yes, okay. So if you didn't spray the herbicide and you plowed the field under - or if you did spray the herbicide and plowed the field under, when they replanted that field, would that herbicide still be in the soil? Would it affect future growth of that field?

The other thing, I guess, is what kind of uptake did you have on the plow-down? Was it enough to, we'll say, eradicate the need or the use of the pesticide and herbicide at a later date? If you plowed the field and it did come back, what control do you have over that? I guess that's my question.

MR. LEWIS: Okay, there are a couple of questions there; one was herbicide residue. It depends on what herbicide you use, most growers would be using Roundup, or glyphosate, and it breaks down pretty quickly, you know, very quickly. Certainly for subsequent crops, there would be no significant residue issues.

The other question was regarding plow-down, the uptake of plow-down. Our AgriRecovery program, I think he said it basically accounted for about two-thirds of the acreage. The recommendation of the consultant from the United States was plow down all your fruiting fields, so that was the driving force for the AgriRecovery program. It accounted for 100 per cent plow-down but you can't, there is no authority to force growers to plow down so you're never going to get 100 per cent compliance; we got about two-thirds. I haven't done the math on it but from what I heard from Peggy it sounded like it was about two-thirds. I think that's phenomenal buy-in myself. Any reduction of inoculant is going to be helpful in fighting these viruses, so two-thirds is pretty darn good, and I would say it was the worst two-thirds so it really is a case of the cup being half full not half empty, I think in this case.

MR. ORRELL: Just one last question, I guess, when a farmer decided that a plow-down was the best, or the Department of Agriculture decided the plow-down was the best, what was done for the farmers afterward, were they given enough to replant the whole crop that they had plowed down or were they given a percentage? I guess my understanding is if you plant a crop today it's not ready until the following season, and I could be wrong when I say that, but if they were missing a growing season or part of a growing season were they compensated for that and how?

MR. LEWIS: It's probably a question for Peggy.

MS. WEATHERBEE: The AgriRecovery program was paying on the replanting so they got some support to put in new plants but within the Department of Agriculture there is a suite of business risk management programs and they are designed to work together, AgriRecovery is one of them. The other three programs that come into effect here is a crop insurance program, but a crop insurance program has very little participation, we actually only had four growers insured in the 2013 year. If they were insured and if they had a loss of yield then they would have been compensated under crop insurance.

Another program that is available is AgriInvest. AgriInvest is a savings account where producers can set aside some funds, they are matched by federal-provincial contributions, they can use this money to invest in their farm or save it for a rainy day when they have a glitch, whether market price, production, or something like that. So they have access to this fund.

Then there is the AgriStability program and AgriStability is an income disaster program and it looks at the historical margin, and a margin is basically the income from their commodities less some specific direct variable expenses used to grow that crop. But it's a whole farm thing so that if that farming operation has strawberries and it has cows, it's looking at the whole farm and if your margin drops below 70 per cent of your historical average that program kicks in with some compensation.

So in 2012 there were 31 of the producers enrolled in AgriStability that had at least \$1,000 worth of strawberry income and 12 of those received payments totalling just over \$1.8 million. Some of your nursery growers that were badly affected probably fall into that category.

In 2013, there have only been three payments in AgriStability for \$27,000. That shows where the market revenue really wasn't affected too badly - like it affected the 12, but not really in the 13 productions.

MR. ORRELL: May I clarify one more thing there?

MR. CHAIRMAN: Mr. Orrell.

MR. ORRELL. Sorry about that, I just want to clarify - from what you said in your presentation earlier, about two-thirds of the money set aside was used - is there a reason the other third wasn't used, and if it was made available and the strawberry producers didn't get 100 per cent of their loss, I guess, because of the loss of production, would that money be available back to them for what they lost if it was already set aside, and will there ever be a time where farmers will be, we'll say 100 per cent protected, other than having to buy the expensive crop insurance? That's after the fact that the crop insurance was available for them for last year because it was 2012 that I think we had the biggest problem - so I guess two questions and quick answers are great, just if they would be able to back that . . .

MS. WEATHERBEE: Do you mind repeating the question?

MR. ORRELL: I'll do the first one quickly. Mr. Lewis said that about two-thirds of the actual money set aside for loss production, or for the outbreak, was used. Will that other

third be able to go back to the people who didn't get 100 per cent coverage or insurance or use, compensated for their loss?

MS. WEATHERBEE: Sorry about that. The AgriRecovery program is cost-shared federally and provincially, 60/40, so it is specific to the program. The uptake was voluntary so we did cover two-thirds of the industry, as Mr. Lewis had said. So the expected, what we thought we'd pay out on it ended up being quite a bit less. In the federal government, they're done. The only mechanism they have to disperse the funds is through the program. The rest of the federal money, if there had been greater uptake, is unavailable to the province.

The province did get some authority to participate in AgriRecovery and the minister had committed to the industry last night that possibly some of the remaining funds that we thought we'd spend out of this could be utilized toward helping them get their quality assurance program underway. The department could be there to help facilitate, but made it very clear that this needs to be an industry initiative and that they want them to have full participation there because we do feel that they will get significant returns at the end of the day from a quality assurance program.

MR. CHAIRMAN: Thank you. Does that answer your question?

MR. ORRELL: No, not really.

MR. CHAIRMAN: One more, Eddie.

MR. ORRELL: Just to clarify, you said that only two-thirds of that money was used - where did the rest of the money go if there was only two-thirds of it used? Or did it actually flow in, unless it was actually used? I think you said \$2.5 million or so available at the time, but only used about \$1.5 million, so there's about \$1 million or \$800,000 that would have been left over - did that get put back into the strawberry industry or did it go back into the Department of Agriculture?

MS. WEATHERBEE: We didn't actually get the money.

MR. ORRELL: Okay. So that money was available and if it didn't get used, it wasn't dispersed. That's my question.

MS. WEATHERBEE: Yes, we have to expenditure it and then ask the federal government to reimburse us.

MR. ORRELL: Sorry, I guess my question wasn't clear. Sorry about that.

MR. CHAIRMAN: Ms. Miller.

MS. MARGARET MILLER: Thank you for your presentation. As a former farmer I cannot imagine the faces on these operators when you told them about plowing down their fields. I just can't imagine having to do that, see your life's blood - I know how much work it is. I remember hearing at the time about the epidemic and the virus, and what was going on. It was mind-boggling, what the industry was having to go through, and I really have to commend the industry and the Department of Agriculture for the steps that you've taken to get hold of this and control it, and what you're doing so far.

One question I had about the aphids is, obviously they would have larvae. Is there any chance of the larvae being in the soil? Is that killed when it's sprayed before it's plowed down, or is that something that could hatch in the next season? What happens with that?

MR. LEWIS: The life cycle is completely on the plant. The nymphs - the larvae equal nymphs, I'll say - they're hatched right out on the plant, usually on the plant leaf or the petiole of the leaves, so there's no soil - what was the rest of the question? I'm sorry.

MS. MILLER: That's a good question. (Laughter) I just wanted to know if there was any chance of it hatching, basically, from the ground afterwards.

MR. LEWIS: No.

MS. MILLER: So there's not, okay.

MR. LEWIS: There is no soil carry-over risk. Your comment about wrestling with the decision to plow down - I know most of our growers and some of them I know very well, and to some people this is black and white. You've got a virus, plow it down. There are so many unknowns in this. There are some varieties that are tolerant. There are some varieties that are very susceptible. We're just figuring this out as we go.

I got test results and most of our fields aren't 100 per cent infected. What if you're 10 per cent infected? That might be a significant threat to the guy down the road, but you're quite happy to tolerate that 10 per cent, or don't feel you can afford to plow it down. I know one grower - I went in the Fall of 2013 and I thought it was bad enough that he really should think about plowing down. I visited him personally, I didn't call him; he was close by. I can remember him saying, John, I can't afford to plow them down. You know, I can't afford to plow them down. I will say that the assistance program, which is the AgriRecovery program - it's a replant program. It gives the grower the money to re-establish that lost acreage, not compensating him for his lost yield. Those are other programs, as Peggy mentioned.

That program was instrumental in triggering that grower to plow down fields. It was enough of a trigger. He plowed down everything, plowed down 15 acres of strawberries and replanted them from that program the next year, and he had no crop last year because he's in the traditional matted-row system. He took a major hit, a major hit.

That's his primary crop. But that program was key to getting him to do that, and he's better off in the long run for doing it. He's got five beautiful fields. He's looking at the best crop he's ever had - well, we're not there yet; it's next year's crop. But it looks great right now and he's happy right now. He said this is the best my fields have looked in 20 years.

I definitely empathize. I wrestled with a lot of these questions, and I really felt for a lot of the growers. Some of them, I didn't have to. Curtis Millen in Great Village was the biggest grower at 130 acres. He plowed them all down in the Spring of 2013, and he did it because his business was threatened and he looked at the science and he said this is what I have to do to restart my business.

There are two ways to go about this: you can fight it by aphid management, vector management, every year and slowly bring the levels of disease down, or you can do the plow-down and reset the bar. That's what he did. He took that hit in 2013 and this year he is back in full production, but he took a major hit in 2013.

Some growers say, I can't afford to do it. They'll work away on the aphid management and they'll get there, but for a lot of growers that program was really key in triggering some hard decisions.

MS. MILLER: Peggy, you mentioned about having meetings with the industry last night and I'd like to get some kind of a sense of how they feel about all this. Have they been happy with what has happened? Are they happy with the Department of Agriculture and the measures that have happened there? Do they have a positive outlook on the future of the industry?

MS. WEATHERBEE: Well, this would be my personal observation. I believe they seem to be very happy with the results of how the crisis was managed, the success of the measures that were put in place and they seem to be very optimistic about their industry and its future.

The quality assurance program, I think they see there is a real benefit, the amount of work and getting buy-in from everybody to do this. They do recognize it's an incredible amount of work and it will take time. I do believe they see there will be a benefit at the end of the day. I think overall the industry is in very good shape and a good frame of mind for the future.

### MR. CHAIRMAN: Mr. MacLeod.

MR. MACLEOD: I'm just curious, you may have sort of answered this already but when you spray the field with herbicide, you plow it down, are you able to replant for the next season or do you have to give it some time for everything to dissipate before you replant?

MR. LEWIS: I could answer that, I did answer that actually. As I said, the aphids live about three weeks so when we did the Spring plow-down in 2013 - of course, there were also fields being plowed down in 2014 - but the very first ones we were asking ourselves that question - how long do we have to wait before we can go back in there? We were worried about aphid survival. We have high levels of inoculum in those fields and we're worried about aphid survival. The plants weren't so much of a concern, it was the aphids.

What we did was we consulted again with the top guys and the answer was: wait three weeks. You've taken away their food source by plowing down that field. Any laggards that are hanging around the edges of the field are going to die, in the Spring particularly, they will die within three weeks because there's no food. Wait three weeks before you replant and that seems to be working quite well. You can actually replant into the same land in the same season of the crop destruct. I always like a good rotation. I don't like going immediately back in the strawberries, but in that particular case you can do it for sure. There's not a problem that you will put yourself at a higher risk of virus infection.

MR. MACLEOD: I'm curious; you said there was one nursery that has decided to get out of the business. Have we lost any of the other producers, as well, as a result of the viruses?

MR. LEWIS: That's a good question. Again, I would say yes. I know we have lost a few of the smaller guys because when you test their fields and they have high levels of virus - and I can think of one gentleman who had very high levels of infection and when I was talking to him - I didn't know him, either, actually it was a guy I didn't know about. We found out about him; he had about five acres. We went and tested and it had high levels of infection. I said well, you know, you're going to have problems next year and you really need to start managing aphids. We'll work with you on that. He said, well, you know, I think this is a good reason for me to pack it in.

I've got a few organic growers who were looking at alternatives. They are not going to start spraying Admire so we have to look at alternatives and there are very few organic. There are some insecticidal soaps that have some efficacy on aphids but not great efficacy, so now we're looking at aphid-proof netting. We wanted to try to get - oh, we're going to lose these small guys.

Some of the aphicides are just, you know - you don't want to rely on one; they have different chemistries and if you rely on one then you are using the same chemistry over and over again. They develop resistance to it so you've got to rotate your chemistries. We've got about five products and we want them to have at least three of them. They can rotate different chemistries. You are buying 10-litre jugs and you've got half an acre of strawberries, they've got enough aphicide there for the next 20 years and they've got three jugs of it, they can't afford it. It's not economically feasible for us so that's where we're losing people - the small acreage guys or the guys who are getting close to retirement, they're older and this is just the final nail, that was the final reason.

In terms of percentage in acreage, I don't have an accurate feel for it but I suspect, before all is said and done, we're probably going to lose maybe 10 per cent of our growers, probably 5 per cent of our acreage. The big growers are in it for the long run, so it's that 80-20 rule - 20 per cent of the growers, 80 per cent of the acreage.

- MR. MACLEOD: Just one more quick question or maybe two. When you replant, how long before that new plant generates a crop? I remember 25 years ago when I planted some strawberries, it was the second year before I actually got a whole lot of strawberries. When they plow down, they replant, when can they expect a return on that replanting?
- MR. LEWIS: It depends on the variety. We have two classes of strawberries now; we have what we call our traditional short-day varieties and we typically plant them in the first year is a planting year, a non-production year, and as you recall, you've got to wait until that second year to get a few berries.

With these day-neutral strawberries it's a completely different story. We can plant them in the Spring, start harvesting them in the middle of July and pick them until the middle of October. So that's a nice scenario if you had to take fields out and you're jumping back into strawberries; day-neutrals allow you to get production in that crop-destruct year.

- MR. MACLEOD: You made a comment earlier in one of your answers that sort of shook me a little bit, woke me up a little bit or whatever I don't know what the right terminology is. You said, when I was with the Department of Agriculture are you not still with the Department of Agriculture?
- MR. LEWIS: Yes and no. Perennia is a Crown Corporation; we belong to the government. The minister is the chair of our board right now.
- MR. MACLEOD: Just with your expertise, I would be very concerned if you weren't there.
  - MR. LEWIS: But I used to be . . .
- MR. CHAIRMAN: Pardon me, Mr. Lewis, if you wouldn't mind, if you could give us a brief overview of Perennia and what it does.
- MR. LEWIS: Okay. You are asking me to be brief, Mr. Chairman, that's a tough assignment for me.
- MR. CHAIRMAN: I know that Perennia is a wonderful thing that is going on and it's very good for the committee to know what that is.
- MR. LEWIS: Well, is everybody familiar with the term "extension"? I think of myself primarily as an extension worker, working with the growers to help them with their

production issues, solve production problems. We used to have a branch under the Department of Agriculture that was our Extension Services, the production technology branch, which was eliminated in 2000. I was the provincial berry specialist at that time, so fortunately somebody had the vision to create a new entity, which originally was ADI. We changed our name to AgraPoint, and now most recently Perennia, but it's the same entity, just a different name. We continue to do much the same things, which were extension services around the province.

The one way we were different - you know, I don't see "Province of Nova Scotia" on my paycheque anymore, but we have the flexibility to do some private consulting, which personally I think is a good thing. As the provincial berry specialist, I had about 300 berry producers. You get spread pretty thin, and if somebody wanted to do a big project with me, you know - I often couldn't do it. I couldn't justify the time. Now if somebody wants to do a big project that will benefit their farm only, if they want to buy my time, they can do that. But basically, anything I do that benefits the industry as a whole, government's paying for it, and that really hasn't changed. So I guess that's Perennia as I see it.

MR. CHAIRMAN: Thank you very much. It's always nice for the chairman to have an opportunity to ask a few questions, if you folks don't mind. Thank you.

Just a couple of quick ones: on all the different programs, the four different programs that we have, is there a minimum acreage size that is required for those? I don't know which one of you would like to answer. Ms. Weatherbee?

MS. WEATHERBEE: Okay, and I'll just maybe get the question clarified. We had several programs that we instituted only for the strawberry industry - the aphid monitoring, the help with the advance payment program, and the AgriRecovery - or we have the other suite of business risk management programs. Which one were you asking about?

MR. CHAIRMAN: More particularly the AgriStability and the AgriRecovery. Are those programs that have a minimum size that's required before you're eligible?

MS. WEATHERBEE: The AgriRecovery, no, there was no minimum size. As John mentioned, it was a replant program, so your basis of payment was based on the amount of acreage which you replanted. So there were some cheques that we wrote for \$200. They were small operations right through to the large operations.

The AgriStability program, the only qualifiers there are that you're farming in Canada and you file a farming income expense statement to Revenue Canada. There is a very nominal fee to participate in the program. Some people do find the paperwork onerous, and their accountants do it - because there is an income tax component, but our farmers can file on a cash basis, as opposed to every other business filing on an accrual basis for their taxes. So they have to submit the supplemental information records on changes of inventory, accounts payable, accounts receivable, and any prepaid. Because they're not normally required to keep that information for income tax purposes, they will

find gathering that information onerous and they will defer it to an accountant. The accountants will charge anywhere from \$500 to \$1,500, so if it's a very small operation, they may find that the cost to participate would be more than they would ever have in the benefits program and choose not to participate.

MR. CHAIRMAN: I know our preparation for this meeting is very well done. I don't know if any of you can answer this question, but I did notice in our package that we received - which is usually an awful lot of statistics and background information - that for some reason, starting in 2013, you cannot access the actual cash value of the strawberry industry. It's protected under confidentiality.

I stumped you. Okay, I was just curious as to why we had information on the cash value of the strawberry industry from Statistics Canada up until 2013 - there's an X in there - just more of a curiosity than anything.

MR. WALKER: I'm not sure why that's the case, but we can certainly go back and access that information for you.

MR. CHAIRMAN: I'm just curious about that.

On a final note, I know Minister Ritz, the federal Minister of Agriculture has been very supportive. I just want to know in our followings of that, we appreciate that. I would assume it was a coincidence last night that there was a meeting with our minister and our staff. Without telling any secrets out of house, could you explain why that meeting was scheduled and what happened there?

MR. LEWIS: I'll take a crack at it. I can't speak for the minister but I know that this quality assurance program has been close to his heart. He's certainly an eloquent advocate for quality. He has spoken very early with the growers about going in that direction, that it's going to help their businesses and help manage risk better from the department. The certification program is a department program. I think he has spoken about having this meeting probably since last winter.

It was not scheduled to get it in ahead of this meeting because it has been rescheduled several times already. It's just trying to get the players together - a convenient time for everybody. As Peggy mentioned, it was good to hear some of our industry leaders. They're much more relaxed, let's put it that way. They're feeling much better.

We've come through the storm, and that definitely came through in the meeting. There was a lot of finger-pointing and it was a very anxious time - the winter of 2012-13 - for any of us involved. To come through the storm and to feel like, hey, we've done a lot of things right - came through last night. Now the minister said yes, that's all good, but we need to prevent something like this from happening again. He believes the quality assurance program is the way to do that. It's going to be a big job.

I think the growers were convinced that it's going to help them. I think they see the task as somewhat daunting. I'll probably be the one to provide some leadership on that. I think we all agree that's the way to go and that's what that meeting was about last night and it really didn't have anything to do with this morning's meeting.

MR. CHAIRMAN: I know I probably could have just simply asked him, but I didn't know the meeting happened and I thought it would be good for all of us to hear and understand.

Thank you all very much. Do you have any closing remarks that any of you would like to add?

MR. WALKER: I want to thank John and Peggy, in particular, for responding to all the questions and thank the committee for letting us come and talk about what I think is really, at this point, a good news story for the province, and a sign of good collaboration between our friends at Perennia, the industry, and the department. Thank you.

MR. CHAIRMAN: Thank you all very much. It certainly has been very comforting to listen and hear of the professional approach that has been taken and the wealth of understanding of what is out there for problems. We'll take a short recess to allow the witnesses to leave and then we'll resume, say, in five minutes. Thank you.

[10:24 a.m. The committee recessed.]

[10:31 a.m. The committee reconvened.]

MR. CHAIRMAN: I call the meeting back to order. Thank you all very much, very interesting group. We'll get into Committee Business.

We had some correspondence; we had some information we received back from the Minister of Natural Resources that was requested at our March meeting and we also had a request from the Nova Scotia Landowners and Forest Fibre Producers Association to possibly be presenters for us.

I believe we're going to have an agenda-setting meeting coming up so I would either ask for a motion to move that request for them to go to that meeting, which I think would be the logical thing for discussion.

The motion was moved by Mr. MacLeod. Would all those in favour of the motion please say Aye. Contrary minded, Nay.

[The motion is carried.]

MR. CHAIRMAN: So we'll have the Nova Scotia Landowners and Forest Fibre Producers Association as part of our agenda-setting group that we'll pick from at the next meeting.

We also had the annual report circulated to everybody, which I am also going to assume that everybody has read in-depth. There had been no changes put forward by any of the members and I would ask for a motion that we approve the 2014 Annual Report of the Standing Committee on Resources.

The motion was moved by Mr. Hines. Would all those in favour of the motion please say Aye. Contrary minded, Nay.

The motion is carried.

We would also now have to have this signed to make it official. Can we continue with the meeting while we're signing that?

MS. KIM LANGILLE (Legislative Committee Clerk): Yes.

MR. CHAIRMAN: Great. Mr. MacLeod.

MR. MACLEOD: John's not here.

MS. LANGILLE: I'll just chase him down.

MR. MACLEOD: Chase him down at the House.

MR. CHAIRMAN: The next order of business is our next meeting date which we have scheduled for December 18<sup>th</sup>. The witness will be the Nova Scotia Beekeepers. I would also suggest that at that same time we have an agenda-setting at the end of that meeting to allow us to look at January. Is that fine with everybody? Then our next meeting date will be December 18<sup>th</sup> at nine o'clock in the morning. As part of that we would also ask everybody to submit their agenda list that they have so that we have a list of them. I assume our clerk will remind us of that.

If there's no further business, I will adjourn the meeting.

[The committee adjourned at 10:34 a.m.]