

Agricultural Innovation Board Meeting

May 22, 2023 1pm-3:08pm

Transcript Text

0:0:0.0 --> 0:0:1.40

890e564a-330e-47b0-8145-b77c5c15c61e

In 2023.

0:0:10.850 --> 0:0:17.810

890e564a-330e-47b0-8145-b77c5c15c61e

OK, girl, welcome to the May 22nd, 2023 meeting of the Agricultural Innovation Board.

0:0:19.730 --> 0:0:25.570

890e564a-330e-47b0-8145-b77c5c15c61e

I guess maybe what we gotta do I there are no board members in the room except for Morgan and myself.

0:0:26.20 --> 0:0:29.180

890e564a-330e-47b0-8145-b77c5c15c61e

Umm well, why don't we start with more?

0:0:29.190 --> 0:0:36.230

890e564a-330e-47b0-8145-b77c5c15c61e

Why don't you call out the board members who are on the call and we'll do that first and then we'll go ahead and get everybody else to introduce this.

0:0:38.270 --> 0:0:42.380

890e564a-330e-47b0-8145-b77c5c15c61e

Can do so the first one I see is clear.

0:0:45.860 --> 0:0:47.640

Cutler, Clarice

Hi there, this is Clarence with Dec.

0:0:50.330 --> 0:0:52.740

890e564a-330e-47b0-8145-b77c5c15c61e

Express, Sarah.

0:0:55.450 --> 0:0:56.580

Owen, Sarah

Hi, Sarah.

0:0:56.650 --> 0:0:58.160

Owen, Sarah

At the health department.

0:0:58.170 --> 0:0:59.320

Owen, Sarah

Sorry I'm not in person today.

0:1:2.400 --> 0:1:5.380

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Thanks and Ryan?

0:1:7.550 --> 0:1:9.830

Ryan Rebozo

Is Ryan Rebozo with the Vermont Center for Ego studies?

0:1:12.550 --> 0:1:13.910

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And when did you?

0:1:15.670 --> 0:1:19.740

Wendy Sue Harper

Wendy Sue Harper, representing the soil biology position.

0:1:24.410 --> 0:1:34.610

890e564a-330e-47b0-8145-b77c5c15c61e

That's all I have online for members, so let's go to some guests and Jonathan worked.

0:1:37.720 --> 0:1:38.250

Jonathan Wolff

Hi everyone.

0:1:38.260 --> 0:1:44.590

Jonathan Wolff

This is Jonathan walk with Primer Piper listening in on behalf of Biotechnology Innovation organization and Crap Life America.

0:1:51.160 --> 0:1:51.490

890e564a-330e-47b0-8145-b77c5c15c61e

Great.

0:1:51.500 --> 0:1:53.940

890e564a-330e-47b0-8145-b77c5c15c61e

How about Lucas Lucas roads?

0:1:55.750 --> 0:1:57.60

Rhoads, Lucas

Well, my name is Lucas Rhodes.

0:1:57.70 --> 0:2:0.30

Rhoads, Lucas

Uh, listening on behalf of the Natural Resources Defense Council.

0:2:8.30 --> 0:2:8.590

890e564a-330e-47b0-8145-b77c5c15c61e  
And.

0:2:12.0 --> 0:2:12.700

890e564a-330e-47b0-8145-b77c5c15c61e  
Fred Putnam.

0:2:17.760 --> 0:2:18.100

Fred Putnam VBA  
Hi there.

0:2:22.470 --> 0:2:24.80

890e564a-330e-47b0-8145-b77c5c15c61e  
No, move it out front.

0:2:24.120 --> 0:2:25.600

890e564a-330e-47b0-8145-b77c5c15c61e  
But with.

0:2:24.100 --> 0:2:26.20

Fred Putnam VBA  
My partner, probably Keepers association.

0:2:26.890 --> 0:2:30.160

890e564a-330e-47b0-8145-b77c5c15c61e  
Thank you, umm.

0:2:30.210 --> 0:2:36.240

890e564a-330e-47b0-8145-b77c5c15c61e  
And then Gene, you have we are they're invited guests today, but you can introduce yourself.

0:2:37.430 --> 0:2:37.970

Gene Harrington  
Hey, Morgan.

0:2:37.980 --> 0:2:38.800

Gene Harrington  
Thanks for having me.

0:2:38.850 --> 0:2:41.600

Gene Harrington  
I'm Gene Harrington with biotechnology innovation organization.

0:2:41.730 --> 0:2:43.780

Gene Harrington  
Happy to be here virtually.

0:2:46.510 --> 0:2:46.820

890e564a-330e-47b0-8145-b77c5c15c61e  
OK.

0:2:46.830 --> 0:2:48.40

890e564a-330e-47b0-8145-b77c5c15c61e  
And then why do we go around the room?

0:2:49.600 --> 0:2:52.170

890e564a-330e-47b0-8145-b77c5c15c61e  
We'll start with my stuff here.

0:2:52.440 --> 0:2:53.290

890e564a-330e-47b0-8145-b77c5c15c61e  
Card parmley.

0:2:53.300 --> 0:2:58.490

890e564a-330e-47b0-8145-b77c5c15c61e  
I'm a field agent with the Vermont agency back Josepho Goss.

0:2:58.500 --> 0:3:11.820

890e564a-330e-47b0-8145-b77c5c15c61e  
I'm at agricultural specialist with the agency guys, definitely Smith with the Agency of Agriculture Deputy Director Brooke Decker with the Agency of Egg Pollinator health specialist.

0:3:13.290 --> 0:3:16.820

890e564a-330e-47b0-8145-b77c5c15c61e  
Dave Huber, deputy director with agency biofilter.

0:3:19.180 --> 0:3:20.450

890e564a-330e-47b0-8145-b77c5c15c61e  
Well, thank you very much everybody.

0:3:22.80 --> 0:3:27.660

890e564a-330e-47b0-8145-b77c5c15c61e  
We have the agenda which Morgan posted on sent to everybody and posted last week.

0:3:28.860 --> 0:3:38.480

890e564a-330e-47b0-8145-b77c5c15c61e  
Today, we're gonna have a farm activities update, then genes going to talk to us about the relevant state legislation on this issue and other states.

0:3:39.270 --> 0:3:50.800

890e564a-330e-47b0-8145-b77c5c15c61e  
Jill will give us a review of the research on minimizing dust from planting operations and in his Heather going to be able to join us today.

0:3:50.810 --> 0:3:51.140

890e564a-330e-47b0-8145-b77c5c15c61e

Yes.

0:3:51.140 --> 0:3:52.590

890e564a-330e-47b0-8145-b77c5c15c61e

So she's gonna call in?

0:3:52.640 --> 0:3:56.170

890e564a-330e-47b0-8145-b77c5c15c61e

Hopefully just during that two to three hour.

0:3:56.240 --> 0:3:56.710

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:3:56.720 --> 0:4:5.520

890e564a-330e-47b0-8145-b77c5c15c61e

So Heather Darby will give us an update, too on her research and with and then we'll talk about the work plan and and future meetings.

0:4:5.530 --> 0:4:9.290

890e564a-330e-47b0-8145-b77c5c15c61e

So with that, why don't we go ahead and get started with farm activities update.

0:4:9.300 --> 0:4:12.40

890e564a-330e-47b0-8145-b77c5c15c61e

And Stephanie, you want to go first, since you're going to have to sneak out?

0:4:12.50 --> 0:4:15.580

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, I actually don't have any updates for the group today.

0:4:15.660 --> 0:4:16.760

890e564a-330e-47b0-8145-b77c5c15c61e

Don't think I'm stealing?

0:4:16.770 --> 0:4:23.970

890e564a-330e-47b0-8145-b77c5c15c61e

Yes, Morgan's gonna steal my update about the agricultural input survey and where we are with that.

0:4:24.240 --> 0:4:26.20

890e564a-330e-47b0-8145-b77c5c15c61e

OK, so there you go, Morgan.

0:4:26.80 --> 0:4:26.480

890e564a-330e-47b0-8145-b77c5c15c61e

Yes.

0:4:27.110 --> 0:4:39.620

890e564a-330e-47b0-8145-b77c5c15c61e

So at our last meeting we talked about another approach to try and increase our participation in the survey we had sent it out and got 49 responses previously.

0:4:39.630 --> 0:4:52.780

890e564a-330e-47b0-8145-b77c5c15c61e

So we accepted the proposal to have ants in the Secretary of Agriculture here send out a note to kind of the organizers of certain organizations.

0:4:52.790 --> 0:5:1.320

890e564a-330e-47b0-8145-b77c5c15c61e

So like, maybe it could have been the communication specialist or the President or vice president of the association.

0:5:1.530 --> 0:5:5.560

890e564a-330e-47b0-8145-b77c5c15c61e

And then asking Anton personally asking them for their help.

0:5:6.620 --> 0:5:13.450

890e564a-330e-47b0-8145-b77c5c15c61e

Disseminating this survey among their organizations, and if they said yes, happy to help, then they got the survey link.

0:5:13.460 --> 0:5:25.730

890e564a-330e-47b0-8145-b77c5c15c61e

So Anton was very kind and sent that email for us on the 10th of May and we got responses back from.

0:5:27.710 --> 0:5:38.330

890e564a-330e-47b0-8145-b77c5c15c61e

12345678 probably about half of the people that we sent it to, so we sent the link to 8 of the.

0:5:40.660 --> 0:5:46.530

890e564a-330e-47b0-8145-b77c5c15c61e

Organizations and basically anywhere between the 10th and the 12th.

0:5:46.540 --> 0:5:47.40

890e564a-330e-47b0-8145-b77c5c15c61e

We did that.

0:5:47.50 --> 0:5:51.130

890e564a-330e-47b0-8145-b77c5c15c61e

We've asked for the deadline to fill out the survey to be June 16th.

0:5:52.50 --> 0:6:1.100

890e564a-330e-47b0-8145-b77c5c15c61e

So far, we've had four additional responses to the survey, so that's where we're at on our kind of round two, OK.

0:6:4.720 --> 0:6:6.670

890e564a-330e-47b0-8145-b77c5c15c61e

Does anybody have any questions about the survey?

0:6:9.590 --> 0:6:11.70

890e564a-330e-47b0-8145-b77c5c15c61e

Board members as well.

0:6:11.150 --> 0:6:13.840

890e564a-330e-47b0-8145-b77c5c15c61e

Laura the Petro has joined us.

0:6:13.850 --> 0:6:15.180

890e564a-330e-47b0-8145-b77c5c15c61e

It looks like Laura, you there?

0:6:16.300 --> 0:6:17.230

DiPietro, Laura

Yes, I am here.

0:6:16.880 --> 0:6:18.690

890e564a-330e-47b0-8145-b77c5c15c61e

Yes, I answer right.

0:6:17.240 --> 0:6:19.50

DiPietro, Laura

Hi I can only be here for an hour though.

0:6:19.850 --> 0:6:20.320

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:6:20.390 --> 0:6:21.980

890e564a-330e-47b0-8145-b77c5c15c61e

Well, thanks for joining.

0:6:24.680 --> 0:6:25.430

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:6:26.400 --> 0:6:28.110

890e564a-330e-47b0-8145-b77c5c15c61e

So that's it for more.

0:6:28.640 --> 0:6:29.590

890e564a-330e-47b0-8145-b77c5c15c61e

Well, yeah.

0:6:29.740 --> 0:6:30.920

890e564a-330e-47b0-8145-b77c5c15c61e

I just want to check with stuff.

0:6:30.930 --> 0:6:31.460

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

0:6:31.500 --> 0:6:31.950

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:6:32.50 --> 0:6:34.320

890e564a-330e-47b0-8145-b77c5c15c61e

So Dave activities update.

0:6:35.740 --> 0:6:36.630

890e564a-330e-47b0-8145-b77c5c15c61e

Hi everybody.

0:6:37.520 --> 0:6:42.360

890e564a-330e-47b0-8145-b77c5c15c61e

I brought a whole bunch of rulebooks for the pesticide rule.

0:6:42.370 --> 0:6:43.980

890e564a-330e-47b0-8145-b77c5c15c61e

We have these now in booklet form.

0:6:45.560 --> 0:6:54.910

890e564a-330e-47b0-8145-b77c5c15c61e

Next, AIB, meaning that we have any board members who show up in person more than happy to give a copy of our rule booklet for easy reference on the rule.

0:6:55.320 --> 0:6:58.890

890e564a-330e-47b0-8145-b77c5c15c61e

We're also at the at a point right now.

0:7:0.360 --> 0:7:0.850

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

0:7:0.860 --> 0:7:12.500

890e564a-330e-47b0-8145-b77c5c15c61e

In the hiring process for 1/5 field agent, where we've received applications, the deadline has closed for the receipt of applying for.

0:7:12.510 --> 0:7:16.740

890e564a-330e-47b0-8145-b77c5c15c61e

This position is going to be a field agent position.



0:7:16.750 --> 0:7:38.490

890e564a-330e-47b0-8145-b77c5c15c61e

We currently have four and this will be our fifth and the position is gonna be shadowing or other four specialist field agents for quite a while until they get delayed the land and then we're able to go out on their own, the 5th field agent will certainly be coming to these meetings as well to get a broader understanding of our culture and Vermont.

0:7:39.550 --> 0:7:40.0

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:7:40.190 --> 0:7:40.660

890e564a-330e-47b0-8145-b77c5c15c61e

Got it.

0:7:41.350 --> 0:7:41.580

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

0:7:41.590 --> 0:7:47.510

890e564a-330e-47b0-8145-b77c5c15c61e

Any questions for any of the any of the updates from the the board members?

0:7:50.130 --> 0:7:51.340

890e564a-330e-47b0-8145-b77c5c15c61e

OK, not seeing any.

0:7:54.120 --> 0:7:54.940

Gene Harrington

Yeah, absolutely.

0:7:51.940 --> 0:7:55.50

890e564a-330e-47b0-8145-b77c5c15c61e

Gina, you ready to go? Yep.

0:7:56.460 --> 0:7:56.990

Gene Harrington

Should I?

0:7:57.0 --> 0:7:58.90

Gene Harrington

Can I share my slides?

0:7:59.570 --> 0:8:0.410

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, yeah, go ahead.

0:8:1.50 --> 0:8:1.660

Gene Harrington  
Awesome. OK.

0:8:25.750 --> 0:8:26.160

Gene Harrington  
See.

0:8:31.750 --> 0:8:33.670

Gene Harrington  
You try to get it to slide presentation here.

0:8:35.860 --> 0:8:38.100

Gene Harrington  
Or it's weird.

0:8:51.750 --> 0:8:52.370

Gene Harrington  
No, I don't want that.

0:8:56.340 --> 0:8:56.530

Gene Harrington  
So.

0:9:1.710 --> 0:9:1.890

Gene Harrington  
OK.

0:9:2.700 --> 0:9:4.130

Gene Harrington  
Can you just see it in that small form?

0:9:5.310 --> 0:9:5.820

890e564a-330e-47b0-8145-b77c5c15c61e  
Yes.

0:9:6.480 --> 0:9:6.700

Gene Harrington  
OK.

0:9:6.70 --> 0:9:9.600

890e564a-330e-47b0-8145-b77c5c15c61e  
Well, we can see if your title.

0:9:9.610 --> 0:9:11.200

890e564a-330e-47b0-8145-b77c5c15c61e  
Fine, we can see your slide.

0:9:12.110 --> 0:9:12.540

Gene Harrington

OK.

0:9:11.210 --> 0:9:12.630

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, I think we can see it.

0:9:12.550 --> 0:9:13.260

Gene Harrington

But it's it's.

0:9:13.270 --> 0:9:16.570

Gene Harrington

Is it big or is it small because on my screen it's kind of small?

0:9:17.710 --> 0:9:21.160

890e564a-330e-47b0-8145-b77c5c15c61e

It's big, but now we just gotta reload that for me.

0:9:21.170 --> 0:9:21.600

890e564a-330e-47b0-8145-b77c5c15c61e

For you?

0:9:21.690 --> 0:9:22.720

890e564a-330e-47b0-8145-b77c5c15c61e

Yep, that was for me.

0:9:22.770 --> 0:9:22.930

890e564a-330e-47b0-8145-b77c5c15c61e

Sorry.

0:9:23.900 --> 0:9:24.290

Gene Harrington

OK.

0:9:24.130 --> 0:9:24.630

890e564a-330e-47b0-8145-b77c5c15c61e

There you go.

0:9:24.490 --> 0:9:24.960

Gene Harrington

Alright then.

0:9:24.670 --> 0:9:26.40

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, yeah, looks fun.

0:9:26.750 --> 0:9:27.820

Gene Harrington

OK, alright, good deal.

0:9:27.830 --> 0:9:29.380

Gene Harrington

Alright, well, I will go ahead and start then.

0:9:29.770 --> 0:9:30.900

Gene Harrington

Well, again, thanks so much.

0:9:30.910 --> 0:9:38.490

Gene Harrington

Morgan and Steve for having me and giving me the opportunity to present on state neonicotinoid use laws and regulations.

0:9:39.150 --> 0:9:39.610

Gene Harrington

Umm.

0:9:39.850 --> 0:9:48.840

Gene Harrington

So I'm gonna start off just give it a quick overview of the federal regulation of neonicotinoids insecticides and treated seeds.

0:9:49.630 --> 0:9:51.370

Gene Harrington

Then I'm gonna hop into.

0:9:51.410 --> 0:9:57.330

Gene Harrington

Kind of the broader state Neo Nic use laws and regulations and I'm going to kind of.

0:9:58.470 --> 0:10:3.480

Gene Harrington

More in on treated seed state treated seed laws and regulations.

0:10:4.440 --> 0:10:9.870

Gene Harrington

Then I'll touch on some of the the pending neonicotinoid treated seed legislation.

0:10:10.80 --> 0:10:16.810

Gene Harrington

Out there, there are at least two states that there's some pretty significant legislation that's worth discussing.

0:10:16.820 --> 0:10:18.770

Gene Harrington

So I'll wrap up with that.

0:10:19.340 --> 0:10:19.670

890e564a-330e-47b0-8145-b77c5c15c61e

Hey.

0:10:19.920 --> 0:10:20.190

890e564a-330e-47b0-8145-b77c5c15c61e

Hey.

0:10:18.820 --> 0:10:21.460

Gene Harrington

So with that, let me just I'm sorry, go ahead. Yep.

0:10:21.790 --> 0:10:22.100

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

0:10:22.110 --> 0:10:22.400

890e564a-330e-47b0-8145-b77c5c15c61e

Dang.

0:10:22.970 --> 0:10:23.530

890e564a-330e-47b0-8145-b77c5c15c61e

What? What?

0:10:23.540 --> 0:10:31.960

890e564a-330e-47b0-8145-b77c5c15c61e

You know, I know who you are very well, but you might just for the benefit of other folks, just sort of explain what your can't roll is.

0:10:32.430 --> 0:10:33.510

Gene Harrington

OK, sure.

0:10:31.970 --> 0:10:34.570

890e564a-330e-47b0-8145-b77c5c15c61e

So put the presentation about that.

0:10:35.280 --> 0:10:35.710

Gene Harrington

Yep.

0:10:35.720 --> 0:10:36.910

Gene Harrington

So I'm Gene Harrington.

0:10:36.920 --> 0:10:43.230

Gene Harrington

I'm the senior director of state government Affairs for Agriculture and Environment for the biotechnology innovation organization.

0:10:43.540 --> 0:10:51.410

Gene Harrington

So we represent the ACT biotechnology sector as well as the energy sector and biopharma companies.

0:10:51.720 --> 0:11:1.970

Gene Harrington

I do exclusively agriculture and environment work, so some of our Member companies are member companies that produce genetically engineered seed.

0:11:2.380 --> 0:11:4.880

Gene Harrington

Genetically engineered animals like G salmon.

0:11:5.730 --> 0:11:16.600

Gene Harrington

So there's just a, you know, example of our Members and previous to that I did state gunman affairs work for the National Pest Management Association.

0:11:16.610 --> 0:11:20.610

Gene Harrington

So do have some background in pesticide regulation as well.

0:11:22.120 --> 0:11:22.400

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you.

0:11:23.160 --> 0:11:23.530

Gene Harrington

OK.

0:11:23.570 --> 0:11:23.760

Gene Harrington

Yep.

0:11:24.960 --> 0:11:25.230

Gene Harrington

OK.

0:11:25.240 --> 0:11:31.990

Gene Harrington

Well, let me dive into just kind of broad federal regulation of neonicotinoids.

0:11:32.850 --> 0:11:33.350

Gene Harrington  
Umm.

0:11:33.670 --> 0:12:3.910

Gene Harrington  
So just starting off the federal insecticide, fungicide and Rodenticide Act, which is kind of the general federal legislation that governs a pesticide use and registration, essentially requires that all pesticides be subject to a rigorous US EPA conducted registration process that looks at human health and environmental risk as well as ecological risk as well.

0:12:4.700 --> 0:12:14.810

Gene Harrington  
So through that process, EPA has to conduct separate assessments looking at human health, ecological as well as environmental risk.

0:12:14.880 --> 0:12:22.840

Gene Harrington  
So including possible risks goes to water, soil, animals, including endangered species.

0:12:23.530 --> 0:12:50.690

Gene Harrington  
Uh, so under FIFRA EPA is also required to reevaluate or go through what's called a registration review process every 15 years to ensure that all pesticide products on the market are subject to the latest scientific review and the most up to date information just to ensure that the registration is as scientific valid as possible.

0:12:51.310 --> 0:12:58.240

Gene Harrington  
Uh, so neonicotinoid insecticides are actually presently going through registration review.

0:12:58.790 --> 0:13:3.40

Gene Harrington  
It's been a multi year process that's been going on for a while.

0:13:3.730 --> 0:13:12.990

Gene Harrington  
It's anticipated that when this is wrapped up in 2024, there will be additional mitigation measures and that could range from.

0:13:14.280 --> 0:13:15.910

Gene Harrington  
Lowering the application rate.

0:13:17.150 --> 0:13:21.830

Gene Harrington  
To spreading out the frequency of applications.

0:13:22.560 --> 0:13:40.470

Gene Harrington

Uh to even more limitations, such as, you know restricting the use for crop or in other environments like, you know residential areas or things like that, we'll just have to see how the registration review process plays out.

0:13:40.480 --> 0:13:41.910

Gene Harrington

But it has been going on for a while.

0:13:42.360 --> 0:13:50.370

Gene Harrington

The agency has been accepting comments at various periods, but they're moving toward the end of of the process.

0:13:51.60 --> 0:13:55.170

Gene Harrington

And like I said, they're expected to wrap up in 2024.

0:13:55.750 --> 0:13:57.120

Gene Harrington

Umm yeah, Steve, go ahead.

0:13:58.360 --> 0:13:59.340

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, I'm just sorry.

0:13:59.690 --> 0:14:7.190

890e564a-330e-47b0-8145-b77c5c15c61e

Reading ahead a little bit, but and on the slide there you say the EPA requested restaurants implement on national stewardship program.

0:14:7.650 --> 0:14:8.230

Gene Harrington

Yep, that was.

0:14:7.720 --> 0:14:11.210

890e564a-330e-47b0-8145-b77c5c15c61e

Is that something that in the interim decision or something that's in effect now?

0:14:11.480 --> 0:14:17.680

Gene Harrington

Yeah, yeah, I think it was in the interim documents that they were talking about just a a stewardship program.

0:14:18.930 --> 0:14:23.250

890e564a-330e-47b0-8145-b77c5c15c61e

Has that been organized, or is it still wait?



0:14:25.560 --> 0:14:25.820

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:14:22.360 --> 0:14:29.420

Gene Harrington

I I think that's still being worked on and you know we'll we'll probably be fleshed out, you know more as the process wraps up.

0:14:30.400 --> 0:14:30.700

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:14:30.710 --> 0:14:30.990

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you.

0:14:31.730 --> 0:14:46.20

Gene Harrington

But you you do bring up a good point in that you know, while there is this, you know, formal registration review process every 15 years, that doesn't mean the agency isn't looking at products throughout.

0:14:47.370 --> 0:14:57.530

Gene Harrington

You know, so for instance, in 2013, EPA did add pollinator protection specific language to neonicotinoid labels.

0:14:58.610 --> 0:15:3.590

Gene Harrington

It added it first in 2013 and I believe it updated it again in 2015.

0:15:4.900 --> 0:15:18.630

Gene Harrington

So even aside from the registration review process, you know they are constantly looking at ways to ensure that human health and the environment are protected as much as possible.

0:15:21.810 --> 0:15:26.900

Gene Harrington

So let me touch on something that I think is kind of important for for this presentation.

0:15:27.660 --> 0:15:30.180

Gene Harrington

And there's a a few reasons it's important.

0:15:30.190 --> 0:15:55.740

Gene Harrington

First of all, just the way it applies to other States and also while I think it might explain why Vermont is a little bit different than the other states in the country with regard to the regulation of neonicotinoid

treated seed umm, so First off I wanna just kind of go over what's known as the treated article exemption.

0:15:56.110 --> 0:16:23.160

Gene Harrington

So under Section 25B of FIFRA treated articles such as treated seed, wooden lumber products, things like railroad ties and utility poles, as well as treated clothing like, you know, medical products and things like that are exempt from FIFRA registration requirements.

0:16:23.690 --> 0:16:33.910

Gene Harrington

Now, that doesn't mean that the products that are used to treat those products are are not subject to difference registration that they are.

0:16:33.960 --> 0:16:43.670

Gene Harrington

So all neonicotinoid treated seeds the neonicotinoid product does have to be registered specifically for that use.

0:16:43.920 --> 0:17:8.310

Gene Harrington

It's just that the seed itself is not registered as a pesticide, but all the insecticides that are used to treat the seed does have to be registered and has to be registered specifically for that use, and then another triggering qualification is, is that it, it essentially has to be used to protect the the substance.

0:17:9.740 --> 0:17:26.190

Gene Harrington

So if it meets those two criteria, it qualifies for the treated article exemption, and this is a similar exemption, that minimum risk pesticides also qualify for.

0:17:26.200 --> 0:17:50.360

Gene Harrington

It's the same section and allows for minimum risk pesticides to, you know, go to the market without meeting fit for registration requirements and essentially what the broader a section 25 and 54 says is that those products have to essentially be of a character which is unnecessary to be subject to fifra.

0:17:50.590 --> 0:17:55.450

Gene Harrington

So the EPA administrator and EPA staff has to to make that determination.

0:17:56.220 --> 0:18:2.240

Gene Harrington

UM, the the product is is a character such that it really doesn't pose a risk.

0:18:3.30 --> 0:18:17.20

Gene Harrington

Uh, so you know, folks may be familiar with the minimum risk pesticide program, so some of the pesticides that qualify for that are things like mint oil, citric acid, garlic, things like that.

0:18:18.90 --> 0:18:31.540

Gene Harrington

Now the reason Vermont is a little bit different than other states is in 2016, Vermont became the first and only state to authorize the regulation of treated article pesticides.

0:18:31.890 --> 0:19:16.400

Gene Harrington

So the legislation that was enacted in 2016 authorized, then Pesticide Advisory Council to work in conjunction with the Secretary of Agriculture to to recommend the regulation of treated article pesticides and then when the Pesticide Advisory Council was disbanded, in lieu of the Agricultural Innovation Board in 2021, those duties were shifted to the AIB and of course, in 2022, when the additional legislation was passed, umm directing the AIB to to work with the Agency to develop BMP for the regulation of neonics treated article seeds.

0:19:17.30 --> 0:19:19.220

Gene Harrington

That kind of took it to the to the next level.

0:19:19.840 --> 0:19:24.670

Gene Harrington

Umm, so is an important distinction kind of explaining.

0:19:24.680 --> 0:19:25.190

Gene Harrington

You know why.

0:19:26.320 --> 0:19:34.950

Gene Harrington

Vermont is is a little bit different than other states, and that that'll, you know, play out through throughout this presentation.

0:19:34.960 --> 0:19:44.690

Gene Harrington

You'll you'll see that you know, Vermont is a little head of the curve as far as looking to to regulate neuronal treated seeds.

0:19:46.330 --> 0:19:55.470

Gene Harrington

So let me just touch on a recent challenge to umm the created article exemption.

0:19:56.440 --> 0:20:12.330

Gene Harrington

So in September of last year, EPA responded to a 27 petition that had asked them to regulate treated seed in general and in particular, a neonicotinoid treated seed uh.

0:20:12.400 --> 0:20:16.60

Gene Harrington

I'm in rejecting that petition.

0:20:16.410 --> 0:20:28.390

Gene Harrington

The agency essentially said that they already do, you know, fully review the pesticide that's being used to treat the seed or whatever treated article.

0:20:28.590 --> 0:20:36.620

Gene Harrington

You know, maybe in question and that those assessments do specifically look at the actual use of the product.

0:20:36.710 --> 0:20:49.230

Gene Harrington

So in the case of the seed, when they're doing the evaluation or registration review, they're not only looking at at the pesticide treatment, but they're looking at the use of the of the treated article.

0:20:50.730 --> 0:20:53.300

Gene Harrington

So why they did reject the?

0:20:55.370 --> 0:21:23.730

Gene Harrington

The petition they did also say that they will be working with States and other folks to develop an issue notice of proposed rulemaking in the future to seek additional information on pesticide sea treatments and also to possibly issue rule pursuant to to FIFRA and to regulate pesticide treated seed and their minds.

0:21:23.800 --> 0:21:32.800

Gene Harrington

They think that that could be a a more efficient and less resource intensive way to to address some of the concerns that were raised in the position.

0:21:33.450 --> 0:21:51.530

Gene Harrington

Uh, so the agency is is also looking UM as they go through the registration review process at labeling instructions for pesticides registered for C treatment, as well as how the seed is being distributed and and used.

0:21:52.130 --> 0:22:7.500

Gene Harrington

Uh, so there there could be and probably will be, some mitigation measures that are included in the final registration review documents with regard to using neonicotinoid treated seed UM.

0:22:7.890 --> 0:22:12.520

Gene Harrington

So we'll we'll have to see how that plays out, but they certainly seem to indicate that that may be the case.

0:22:13.860 --> 0:22:20.540

Gene Harrington

Umm, so let me switch to another federal law that also governs the labeling of of treated seed.

0:22:20.780 --> 0:22:22.910

Gene Harrington

And that's the federal seed act.

0:22:23.120 --> 0:22:34.550

Gene Harrington

And this this law is administered by the United States Department of Agriculture and under this law, there are certain labeling requirements for treated seed.

0:22:34.920 --> 0:22:42.870

Gene Harrington

So if a manufacturer is gonna sell treated seed, they do have to make certain things clear.

0:22:43.60 --> 0:22:48.620

Gene Harrington

They have to indicate now what what product is used to to treat the seed.

0:22:48.730 --> 0:22:54.670

Gene Harrington

So either you know the the trade name or the technical name of the active ingredient.

0:22:56.100 --> 0:23:7.620

Gene Harrington

In addition to that, they also have to have instructions making clear that you you can't use for food, feed and oil purposes.

0:23:7.880 --> 0:23:17.860

Gene Harrington

And there's a number of states that have very similar or identical language in their state laws or regulations, and I think Vermont may.

0:23:17.870 --> 0:23:18.910

Gene Harrington

Maybe one of those states.

0:23:19.680 --> 0:23:29.940

Gene Harrington

Umm, so it it's fairly common for states who have also enacted the Federal Seed Act requirement in in their statutes and and room and regulations.

0:23:31.370 --> 0:23:55.270

Gene Harrington

And then the the last federal law that I want, I want to touch on or requirement I want to touch on is a requirement under the Federal food, Drug and Cosmetic Act, the US Food and Drug Administration

requires that treated seed be colored just to distinguish it from non treated seed and make sure that users are aware that it's that it's treated.

0:23:57.680 --> 0:24:1.540

Gene Harrington

So with that, let me hop to the states stuff before I go there.

0:24:1.550 --> 0:24:10.980

Gene Harrington

Just want to see if there's any any questions on just kind of the federal framework that Neo, Nick had noid insecticides and treated seed or are subject to.

0:24:12.380 --> 0:24:13.70

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Any questions?

0:24:13.80 --> 0:24:14.170

890e564a-330e-47b0-8145-b77c5c15c61e

Anybody raise your hand?

0:24:14.920 --> 0:24:15.890

890e564a-330e-47b0-8145-b77c5c15c61e

Nobody online, no.

0:24:18.450 --> 0:24:18.880

Gene Harrington

OK.

0:24:19.50 --> 0:24:20.400

Gene Harrington

Well, let me hop then.

0:24:20.470 --> 0:24:21.20

Gene Harrington

Uh.

0:24:21.70 --> 0:24:35.140

Gene Harrington

Real quickly to uh state laws and 1st I'm gonna start off just running through all the various state neonicotinoid use and application laws and regulations.

0:24:35.770 --> 0:24:42.120

Gene Harrington

So the purposes of this presentation are really going to focus on the laws that pertain to use.

0:24:42.230 --> 0:24:53.930

Gene Harrington

I'm not going to cover laws that have established pollinator protection committees or have directed state environmental agencies to do their own risk assessments.

0:24:54.620 --> 0:25:4.30

Gene Harrington

I may touch on that a little bit as I go through, but I'm I'm really gonna focus really on the laws and rules that pertain to the the use of of Neo Nic.

0:25:4.40 --> 0:25:4.750

Gene Harrington

Insecticides.

0:25:6.360 --> 0:25:9.90

Gene Harrington

So with that, let me start off in Oregon.

0:25:9.320 --> 0:25:31.930

Gene Harrington

So in 2015, in response to 2013 B Kill incident that happened in Portland suburb, the Oregon Department of Agriculture adopted a rulemaking that essentially prohibits the application of neonicotinoid insecticides to Linden and basswood trees.

0:25:33.690 --> 0:25:48.980

Gene Harrington

Now, since they've adopted that regulation, that there has been some research, some of it conflicting, on whether the Linden trees are naturally toxic to some bees.

0:25:49.610 --> 0:25:53.940

Gene Harrington

Some research suggests that it it might be some research says otherwise.

0:25:54.470 --> 0:26:15.790

Gene Harrington

Some people theorize that you know, perhaps there's a synergistic effect between the neuronal insecticides and the linden and basswood trees, but nevertheless, we're gonna adopted this rulemaking in 2015 and as you'll see, a few other states have have followed suit with what organ did in in 2015.

0:26:17.90 --> 0:26:29.260

Gene Harrington

So in 2016, Maryland and Connecticut, between became the first states to adopt laws restricting the use of new Nick Android insecticides.

0:26:29.510 --> 0:26:31.530

Gene Harrington

So I'll start off with Marilyn first.

0:26:32.430 --> 0:26:34.340

Gene Harrington

So the the Maryland law essentially.

0:26:35.550 --> 0:26:42.0

Gene Harrington

Restricts the residential or consumer use of neonicotinoid insecticides.

0:26:42.630 --> 0:26:43.890

Gene Harrington

It does not apply to.

0:26:45.230 --> 0:26:51.340

Gene Harrington

Farmers or other agriculture uses are treated seed and then in Connecticut.

0:26:52.60 --> 0:27:5.920

Gene Harrington

Uh, they designated or required the Department of Energy and Environmental Protection to designate a new Nic, insecticides as a restricted use pesticide, and similar to Oregon.

0:27:5.980 --> 0:27:13.560

Gene Harrington

They also prohibited the application of NEO Nic insecticides to bass wood and Linden trees.

0:27:14.220 --> 0:27:15.570

Gene Harrington

Uh, and I'll.

0:27:15.660 --> 0:27:18.830

Gene Harrington

I'll get into this later, but I I do wanna touch on it now.

0:27:19.400 --> 0:27:23.940

Gene Harrington

Connecticut did become the the first state to pass uh Neo.

0:27:23.950 --> 0:27:25.780

Gene Harrington

Nick treated seeds specific law.

0:27:41.120 --> 0:27:41.750

890e564a-330e-47b0-8145-b77c5c15c61e

Music, yeah.

0:27:27.240 --> 0:27:42.550

Gene Harrington

It directed its Department of Agriculture, working with Kenneth Can experiment station to develop some BMP for the use of neuronic insecticide treated seed.

0:27:43.960 --> 0:27:47.90

Gene Harrington

Now I'll I'll touch on this a little more.



0:27:47.160 --> 0:28:4.170

Gene Harrington

When I kind of bore in on the neonic treated seed specific laws, but certainly the the dust was was the primary concern in passing the Connecticut law and I'll I'll touch on that a little more as I as I get to that point.

0:28:4.720 --> 0:28:8.20

Gene Harrington

But that was that was certainly the primary consideration.

0:28:8.820 --> 0:28:9.420

Gene Harrington

Umm.

0:28:9.520 --> 0:28:29.910

Gene Harrington

In in, in acting that Connecticut lawn in 2016 and of course Vermont in in 2019 passed legislation requiring the Secretary of Agriculture to require neonic insecticides be improved as restricted use pesticides.

0:28:30.290 --> 0:28:48.350

Gene Harrington

Now that 2019 law did expressly carve out treated article seed, but again as a as I mentioned earlier, you know, Vermont does have the authority to regulate treated article seed, you know, under the the 2016 law.

0:28:48.990 --> 0:28:56.280

Gene Harrington

Uh, so you know it's it is an issue that has, you know, already been addressed some someone in in Vermont.

0:28:57.840 --> 0:29:14.820

Gene Harrington

So in 2021 Main past a a, A bill essentially directing the main board of Pesticide Control to adopt rulemaking prohibiting the the use of neonicotinoid insecticides.

0:29:15.810 --> 0:29:16.270

Gene Harrington

Umm.

0:29:16.530 --> 0:29:25.280

Gene Harrington

In residential settings it it does have some exemptions for commercial applicators, but it's a fairly strict law.

0:29:25.290 --> 0:29:32.320

Gene Harrington

And then it's very much limits the use of neonicotinoid insecticides in residential settings.

0:29:32.930 --> 0:29:43.790

Gene Harrington

It does not apply to treated seed, however, and then of course in 2022 UM, the legislature in in Vermont passed legislation.

0:29:44.440 --> 0:29:57.320

Gene Harrington

Uh, you know, requiring his secretary of ag working with the AB to develop rulemaking establishing BMPS for the use of neonic treated seeds.

0:29:57.720 --> 0:30:4.230

Gene Harrington

And then, of course, it also required to report to the legislature on nonionic treated seeds.

0:30:4.380 --> 0:30:10.20

Gene Harrington

And of course, you all sent that report to the legislature this this past February.

0:30:11.730 --> 0:30:18.420

Gene Harrington

So more recent laws and and rules.

0:30:19.150 --> 0:30:26.640

Gene Harrington

Massachusetts in February of 2021, the Massachusetts Pesticide Board subcommittee.

0:30:27.270 --> 0:30:32.880

Gene Harrington

Umm, essentially adopted a regulation that's.

0:30:33.710 --> 0:30:40.200

Gene Harrington

Reclassified Neo Nic insecticides as restricted use pesticides.

0:30:41.750 --> 0:30:51.220

Gene Harrington

For the purpose of residential applications, this rulemaking did did not impact agricultural treatments or treated seed.

0:30:52.190 --> 0:31:13.310

Gene Harrington

But it does impact all residential uses in the state of Massachusetts are there are now subject to the restricted use classification now can only be purchased by certified applicators and used by certified applicators and then similar to what Massachusetts did.

0:31:13.600 --> 0:31:23.890

Gene Harrington

New York adopted rulemaking in 2022 that essentially said in early 2023.

0:31:24.240 --> 0:31:28.720

Gene Harrington

That's Neo Nick neuronics.

0:31:28.730 --> 0:31:36.920

Gene Harrington

Insecticides would be classified as restricted use and that actually includes seed treatment.

0:31:37.170 --> 0:31:43.640

Gene Harrington

So it doesn't include the seed, but it does include the seed treatment.

0:31:43.730 --> 0:32:24.390

Gene Harrington

So if somebody is purchasing a neuronics insecticide to treat seed, they have to be a certified applicator and we've also got to be certified applicator or someone operating under the direct supervision of a certified applicator in order to make that particular application and then 2022 late 2022 or where I'm she's being early 2022 Governor Phil Murphy in New Jersey signed legislation into law directing DP to initially classify.

0:32:25.800 --> 0:32:42.340

Gene Harrington

Neuronics insecticides is restricted use, but then starting in October of this year, the law restricts the use of those products even further, greatly limiting non agricultural applications.

0:32:43.190 --> 0:32:59.840

Gene Harrington

UM, so in addition to the RUP, uh, classification starting in October, neuronics insecticides will be even less used in in New Jersey, at least in non agricultural settings.

0:33:1.320 --> 0:33:12.680

Gene Harrington

This particular law does not affect agricultural applications, and it does expressly exempt any application to protect agricultural seed.

0:33:13.530 --> 0:33:25.740

Gene Harrington

And then also in in 2022, uh, Rhode Island pass legislation that's effective in January of 2024 that classifies new.

0:33:25.800 --> 0:33:28.470

Gene Harrington

Nic in insecticides.

0:33:29.120 --> 0:34:1.910

Gene Harrington

UM, as as restricted use and it severely limits their use in outdoor settings, but similar to the New Jersey

law, the Rhode Island Law, I'm also expressly exempts treated seed umm and the last law I want to cover on on this this slide is Colorado just passed legislation that was signed into law by Governor Polis.

0:34:2.590 --> 0:34:19.100

Gene Harrington

Umm, that will direct the Department of Agriculture starting on January 1st, the 2024 to essentially make new Nic Insecticides limited use insecticides.

0:34:19.310 --> 0:34:32.260

Gene Harrington

So under that classification in Colorado, they're only going to be able to to be sold by licensed dealers umm and used by licensed applicators.

0:34:33.30 --> 0:34:41.770

Gene Harrington

UM, now the Department of Agriculture has interpreted the legislation to not apply to treated seed in Colorado.

0:34:43.10 --> 0:34:58.550

Gene Harrington

Largely because of the treated seed exemption at the federal level and then the last legislation, I I wanna touch on is legislation actually just passed the Minnesota Legislature in the last couple days.

0:34:58.770 --> 0:35:14.550

Gene Harrington

It hasn't been signed by the governor yet, but I'm almost sure well be because these provisions are in a large environment and natural resources funding bill, so I'm almost certain that Governor Waltz will sign this this bill into law in the next couple of days.

0:35:15.530 --> 0:35:23.440

Gene Harrington

So it does a handful of things with with regard to neonicotinoid insecticides as well as treated seed.

0:35:23.950 --> 0:35:38.620

Gene Harrington

So the first thing that it does is it will prohibit the use of neonicotinoid insecticides and wildlife management areas, state parks and you know, others states lands.

0:35:38.810 --> 0:35:41.340

Gene Harrington

It will prohibit use of neonics.

0:35:41.590 --> 0:36:17.980

Gene Harrington

It also directs the Department of Agriculture to develop consumer guidance with regard to the proper use and disposable disposal of of treated seed, and it further mandates retailers that are selling seated, treed uh that's treated seed to to make those that information available at their their retail locations or

at the very least post information regarding to the handling and and storage and disposal of of treated seed.

0:36:19.950 --> 0:36:36.700

Gene Harrington

You know also includes language that kind of parrots, pesticide labels, prohibiting a person from, you know, using or storing treated seed or disposing of treated seed in a manner that could jeopardize the environment or or human health.

0:36:36.970 --> 0:36:45.930

Gene Harrington

And then lastly, it authorizes certain cities to limit the residential use of neonicotinoid insecticides.

0:36:48.140 --> 0:37:4.760

Gene Harrington

So before I hopped to the next slide, which is kind of really, you know, examines the the neonics specific laws and regulations, just wanna stop there and there, see if there's any questions on the the broader legislation.

0:37:13.440 --> 0:37:14.140

Gene Harrington

Pennsylvania.

0:37:7.350 --> 0:37:14.440

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, it didn't, Steve, anything going on in Pennsylvania, you're of any legislation?

0:37:14.970 --> 0:37:17.20

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, we'll make your legislation in Pennsylvania.

0:37:18.100 --> 0:37:20.110

Gene Harrington

Umm, not that I'm aware of.

0:37:20.690 --> 0:37:20.950

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:37:20.300 --> 0:37:24.450

Gene Harrington

There's a few other states on I'll I'll touch on this toward the town.

0:37:24.460 --> 0:37:35.50

Gene Harrington

The present presentation that there are a handful of states where there are bills that are are moving, but at this point I'm not aware that that Pennsylvania is is one of them.

0:37:36.130 --> 0:37:40.880

890e564a-330e-47b0-8145-b77c5c15c61e

I'm just curious because it's such a large agricultural state and a lot of the same issues to that.

0:37:40.890 --> 0:37:47.700

890e564a-330e-47b0-8145-b77c5c15c61e

Just curious that it's been raised there or been in the, you know, in consideration.

0:37:48.180 --> 0:37:51.940

890e564a-330e-47b0-8145-b77c5c15c61e

And then also I don't you may be talking about this later, but the New York?

0:37:53.360 --> 0:37:54.140

890e564a-330e-47b0-8145-b77c5c15c61e

Legislation.

0:37:55.270 --> 0:37:55.470

Gene Harrington

Yep.

0:37:59.140 --> 0:38:0.130

Gene Harrington

Ohh yeah yes.

0:37:54.150 --> 0:38:0.420

890e564a-330e-47b0-8145-b77c5c15c61e

That's the being asked that I gonna talk about the status of that later or OK.

0:38:3.400 --> 0:38:3.640

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:38:6.770 --> 0:38:6.990

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:38:11.120 --> 0:38:11.360

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:38:0.140 --> 0:38:15.520

Gene Harrington

So all there, there's four states that I'll I'll kind of dive into with regard depending legislation cause those those four you know have the the best chance of passing and and two of those one being New York specifically cover treated seeds.

0:38:16.820 --> 0:38:17.850

890e564a-330e-47b0-8145-b77c5c15c61e

OK, alright, great.

0:38:17.860 --> 0:38:18.10  
890e564a-330e-47b0-8145-b77c5c15c61e  
Thanks.

0:38:18.720 --> 0:38:18.900  
Gene Harrington  
Yep.

0:38:21.120 --> 0:38:21.240  
Gene Harrington  
The.

0:38:18.780 --> 0:38:23.400  
890e564a-330e-47b0-8145-b77c5c15c61e  
I have a question being this is Morgan, can you just go back to the Minnesota one for two seconds?

0:38:23.960 --> 0:38:24.220  
Gene Harrington  
Yep.

0:38:24.540 --> 0:38:25.990  
890e564a-330e-47b0-8145-b77c5c15c61e  
You're all of those.

0:38:30.410 --> 0:38:30.800  
890e564a-330e-47b0-8145-b77c5c15c61e  
So.

0:38:29.780 --> 0:38:34.90  
Gene Harrington  
So all those provisions are in 1 essentially funding package.

0:38:35.250 --> 0:38:41.800  
890e564a-330e-47b0-8145-b77c5c15c61e  
OK, so like I I guess I was going with like 5 right now it's just like I'm taking notes for the meeting and I'm just for five.

0:38:42.270 --> 0:38:46.20  
890e564a-330e-47b0-8145-b77c5c15c61e  
So can a city like can that be applicable to a tree of theater?

0:38:46.30 --> 0:38:46.580  
890e564a-330e-47b0-8145-b77c5c15c61e  
No.

0:38:46.950 --> 0:38:47.960  
Gene Harrington  
No, no.

0:38:46.690 --> 0:38:50.820  
890e564a-330e-47b0-8145-b77c5c15c61e  
Like a city can't admit just residential, right.

0:38:52.10 --> 0:38:52.380  
890e564a-330e-47b0-8145-b77c5c15c61e  
OK.

0:38:52.390 --> 0:38:52.670  
890e564a-330e-47b0-8145-b77c5c15c61e  
Thank you.

0:38:48.190 --> 0:39:1.460  
Gene Harrington  
So agricultural uses are are exempted and and I I should note, umm, this applies to only first class cities which in Minnesota's like a handful of cities.

0:39:1.470 --> 0:39:2.610  
Gene Harrington  
You know, Saint Paul?

0:39:2.620 --> 0:39:3.590  
Gene Harrington  
Minneapolis.

0:39:4.140 --> 0:39:18.170  
Gene Harrington  
Maybe Rochester Duluth, so there will be a handful of cities that will have the ability to restrict the residential use of neonicotinoid insecticides, but agricultural treatments are are exempted.

0:39:19.100 --> 0:39:19.410  
890e564a-330e-47b0-8145-b77c5c15c61e  
OK.

0:39:19.420 --> 0:39:19.810  
890e564a-330e-47b0-8145-b77c5c15c61e  
Thank you.

0:39:21.20 --> 0:39:21.810  
Gene Harrington  
Yep, and I'll.

0:39:29.220 --> 0:39:29.810  
890e564a-330e-47b0-8145-b77c5c15c61e  
Yeah.

0:39:21.880 --> 0:39:29.890  
Gene Harrington



Ohh I'm I I apologize for not emailing to this this to you earlier, but can I just email it to you and Steve and you can get it out to the the full group.

0:39:29.860 --> 0:39:30.110

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

0:39:30.120 --> 0:39:31.50

890e564a-330e-47b0-8145-b77c5c15c61e

Well, yeah.

0:39:31.60 --> 0:39:31.370

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

0:39:31.380 --> 0:39:35.270

890e564a-330e-47b0-8145-b77c5c15c61e

And we'll save it and it will be posted on the website too, with the meeting material.

0:39:35.300 --> 0:39:36.150

890e564a-330e-47b0-8145-b77c5c15c61e

So that'll be perfect.

0:39:36.460 --> 0:39:36.760

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you.

0:39:37.570 --> 0:39:37.980

Gene Harrington

OK.

0:39:38.210 --> 0:39:38.520

Gene Harrington

Yeah.

0:39:38.530 --> 0:39:44.370

Gene Harrington

So as as soon as I'm done, I'll I'll just email it to you and you can go ahead and and post it or whatever.

0:39:45.240 --> 0:39:45.650

890e564a-330e-47b0-8145-b77c5c15c61e

Yep.

0:39:45.700 --> 0:39:45.950

890e564a-330e-47b0-8145-b77c5c15c61e

Great.

0:39:45.960 --> 0:39:46.260

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you.

0:39:47.500 --> 0:39:47.720

Gene Harrington

Yep.

0:39:48.520 --> 0:39:48.960

Gene Harrington

OK.

0:39:49.220 --> 0:39:52.350

Gene Harrington

So any any other questions?

0:39:57.200 --> 0:39:58.200

890e564a-330e-47b0-8145-b77c5c15c61e

But don't say anything.

0:39:58.590 --> 0:39:59.640

Gene Harrington

OK, alright.

0:39:59.650 --> 0:40:12.0

Gene Harrington

So let me start diving in a little more closely or deeper to the two jurisdictions that have in addition to Vermont that have done something specific to NEO.

0:40:12.10 --> 0:40:13.380

Gene Harrington

Nic treated seeds.

0:40:14.360 --> 0:40:41.0

Gene Harrington

So has anyone earlier, you know, Connecticut passed legislation that was a little bit broader, but it included specific provision that a directed the Department of Agriculture to work with the Connecticut Experiment Station to develop BMP's that touched on a number of things including use and disposal and loop that happened.

0:40:41.380 --> 0:40:57.310

Gene Harrington

Talk about that and you know, as you can see in in the the bill language, you know certainly one of the primary concerns was the the dust that that can sometimes be created when seeds are being planted.

0:40:57.740 --> 0:41:12.440

Gene Harrington

Now you know, over the last 10 years there have been, you know, a number of strides made by equipment manufacturers, the seed manufacturers, to try to mitigate that issue.

0:41:13.70 --> 0:41:18.500

Gene Harrington

I think there's gonna be presenters later to, you know, talking about that planners and and things like that.

0:41:18.510 --> 0:41:39.230

Gene Harrington

So, you know, I'll defer to them on on all of the specifics, but over the last 10 years, that's certainly an issue that you know, both planner equipment manufacturers as well as the seed manufacturers have tried to address as far as their formulation and and coding and and things like that.

0:41:49.790 --> 0:41:50.340

890e564a-330e-47b0-8145-b77c5c15c61e

The.

0:41:40.240 --> 0:41:53.630

Gene Harrington

And I I included the the BMP's in a in a link so when I sent it to Morgan you know it'll be easy to to access and then the next state I wanna touch on is is New York.

0:41:53.640 --> 0:41:56.280

Gene Harrington

York, so New York's rulemaking.

0:41:57.260 --> 0:42:1.530

Gene Harrington

Specifically, classifies the treatment of the seed.

0:42:1.540 --> 0:42:20.280

Gene Harrington

So an applicator applying a NEO Nic to a seed as a restricted use application, so it is subject to the product being purchased by certified commercial applicator as well as used by a certified commercial applicator.

0:42:20.760 --> 0:42:27.360

Gene Harrington

Or to the extent that New York laws allows it under the direct supervision of a of a certified applicator.

0:42:28.290 --> 0:42:36.780

Gene Harrington

I do not believe, however, it applies to the planning of the seed, so it it doesn't make the seed of restricted use pesticide.

0:42:36.790 --> 0:42:38.560

Gene Harrington

It just makes the truth.

0:42:44.840 --> 0:42:45.710

890e564a-330e-47b0-8145-b77c5c15c61e

Gene, the state.

0:42:38.570 --> 0:42:47.30

Gene Harrington

The treated seed application restricted use application, so Yep, I'm sorry, go ahead.

0:42:47.130 --> 0:42:58.260

890e564a-330e-47b0-8145-b77c5c15c61e

Let's just just for clarification the products that are used to treat the seed are separate registrations and the products other neonicotinoid like foliar applications.

0:42:58.270 --> 0:42:59.430

890e564a-330e-47b0-8145-b77c5c15c61e

So treatments that kind of things.

0:43:0.520 --> 0:43:1.870

Gene Harrington

I know some of them are.

0:42:59.440 --> 0:43:3.590

890e564a-330e-47b0-8145-b77c5c15c61e

Is that correct or are they the same? Yeah.

0:43:1.920 --> 0:43:11.410

Gene Harrington

I know I do know some of them are because if you look at the New York RUP list, they they are you know very specific seed treatment products.

0:43:12.20 --> 0:43:12.360

890e564a-330e-47b0-8145-b77c5c15c61e

Right.

0:43:11.820 --> 0:43:16.100

Gene Harrington

As far as every product I I don't, I don't know that.

0:43:17.30 --> 0:43:17.870

890e564a-330e-47b0-8145-b77c5c15c61e

OK, alright.

0:43:19.590 --> 0:43:20.260

Gene Harrington

Yeah, I don't.

0:43:20.270 --> 0:43:24.580

Gene Harrington

I don't know if if some manufacturers you know have multiple use.

0:43:25.790 --> 0:43:28.720

Gene Harrington

Products and treated seed is just just one of them.

0:43:29.570 --> 0:43:29.790

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:43:29.110 --> 0:43:36.950

Gene Harrington

It it does appear, though, from New York's RUP list that some products are just for the sole purpose of treating the seed.

0:43:37.920 --> 0:43:39.170

890e564a-330e-47b0-8145-b77c5c15c61e

OK. Thanks.

0:43:41.630 --> 0:43:49.640

Gene Harrington

So let let me touch on on Minnesota, because I do think Minnesota's instructive for for you know, what you're doing in in Vermont.

0:43:50.50 --> 0:44:1.610

Gene Harrington

So in in May of 2019, the Minnesota Department of Agriculture did issue BMP's for the use of insecticide treated seeds.

0:44:3.190 --> 0:44:8.200

Gene Harrington

Now you know I do wanna touch on some other things that that MDA has has done as well.

0:44:8.450 --> 0:44:10.150

Gene Harrington

So in 2013.

0:44:11.210 --> 0:44:24.60

Gene Harrington

MDA began a kind of a comprehensive review of new Nic insecticides, so that included, you know, looking at it treated seeds as well.

0:44:24.510 --> 0:44:44.670

Gene Harrington

And based on the review that they initiated in 2013, the MDA issue, a report in August, the 2016 now MDA did recommend to the legislature that the legislature passed legislation authorizing MDA to regulate treated seed.

0:44:45.600 --> 0:44:48.510

Gene Harrington

To date, the legislature has not done that.

0:44:48.580 --> 0:45:10.600

Gene Harrington

They they've certainly considered such legislation, but they they have not done that as of yet, but

certainly the whole Neo Nic use issue has been one that has been closely examined in in Minnesota, you know, not just resident out job applications, but you know certainly treated seed as as well.

0:45:11.670 --> 0:45:17.140

Gene Harrington

So that that is certainly a state that that has has looked at the issue very closely over the years.

0:45:17.680 --> 0:45:33.230

Gene Harrington

And then the next state that I I want to touch on and I didn't want to get too deeply in every state that that, you know directed their state lead agency to develop a report on new Nic insecticide use.

0:45:33.380 --> 0:45:49.830

Gene Harrington

But the main reason I bring up this particular report from Washington state is because the legislation that passed directing Washington State Department of Agriculture to issue a report to the Washington legislature did specifically touch on NEO Nic treated seed.

0:45:50.240 --> 0:46:7.360

Gene Harrington

So, specifically, the Washington legislature passed legislation in spring of 2021 and then in December of that year, WSDA did issue a report in compliance with the legislation.

0:46:7.590 --> 0:46:10.280

Gene Harrington

So they looked at a number of things.

0:46:10.290 --> 0:46:29.970

Gene Harrington

They looked at the cases of B desks and in Washington state UM and based on and their research and examination, they were not able to find any B deaths related to Neo Nic applications or treat segments in the the last seven years.

0:46:30.790 --> 0:46:41.360

Gene Harrington

And then in their recommendations, which they made a series of to the legislature, none of those recommendations touch on neuronically treated seed.

0:46:43.90 --> 0:47:5.650

Gene Harrington

And then as Steve alluded to earlier, there are some states that are seriously consider considering bills related to Neo Nic treated seed as well as broader bills that are focused, you know more on residential or non agriculture applications.

0:47:5.880 --> 0:47:9.710

Gene Harrington

So let me touch on the treated seed bills first.

0:47:9.920 --> 0:47:17.420

Gene Harrington

So probably the two most significant bills that fall in those buckets are bills in California and New York.

0:47:18.690 --> 0:47:21.860

Gene Harrington

So the New York bill is specific to NEO.

0:47:21.870 --> 0:47:31.60

Gene Harrington

Nick treated seed and that would essentially ban the the use of those seeds starting in January 1st, 2026.

0:47:31.510 --> 0:47:37.580

Gene Harrington

So that particular bill is passed the Assembly, but it it hasn't passed the Senate as of yet.

0:47:38.450 --> 0:47:46.560

Gene Harrington

New York adjourns on June 8th, so you know we will know the outcome of that bill in the next couple weeks.

0:47:47.640 --> 0:47:50.430

Gene Harrington

The California bill is a is a bit broader.

0:47:50.560 --> 0:48:4.630

Gene Harrington

It certainly would would cover neuronic treated seeds, but it it covers treated seed in general and that would essentially give regulatory authority to Cali, PA or Cal DPR.

0:48:4.640 --> 0:48:5.210

Gene Harrington

Excuse me?

0:48:5.320 --> 0:48:7.10

Gene Harrington

California Department of Pesticide regulation.

0:48:9.390 --> 0:48:19.660

Gene Harrington

To develop regulations with regard to the use of of treated seed, so that bill is set to hit the assembly floor probably this week.

0:48:20.870 --> 0:48:23.130

Gene Harrington

California session goes pretty late.

0:48:23.140 --> 0:48:29.850

Gene Harrington

They go into late August, so probably not gonna know the outcome of that bill.

0:48:31.390 --> 0:48:40.880

Gene Harrington

You anytime soon, but it you know it certainly is, is moving and it it could pass by the end of their session in in late August.

0:48:40.930 --> 0:48:43.500

Gene Harrington

So, you know, we'll, we'll just have to see how that plays out.

0:48:43.770 --> 0:48:55.340

Gene Harrington

And then the other bills I wanted to touch on Nevada and Connecticut are also seriously considering bills related to neonicotinoid use.

0:48:56.110 --> 0:49:1.550

Gene Harrington

Those bills don't cover agricultural use or treated seed.

0:49:2.830 --> 0:49:11.370

Gene Harrington

The Nevada bill would greatly limit non agricultural applications and the Connecticut bill would essentially.

0:49:12.790 --> 0:49:20.820

Gene Harrington

Tighten their 2016 law and make non agricultural applications.

0:49:21.790 --> 0:49:23.500

Gene Harrington

You know, even even more difficult.

0:49:24.850 --> 0:49:28.400

Gene Harrington

So those two bills definitely have a chance to pass.

0:49:28.410 --> 0:49:34.580

Gene Harrington

The Nevada bill is on the Senate floor calendar and they end.

0:49:34.590 --> 0:49:36.680

Gene Harrington

I wanna say Jan June 5th.

0:49:36.890 --> 0:49:47.690

Gene Harrington



It's already passed the assembly, so it appears to have a pretty good chance of passing, and the Connecticut bill seems to have broad support.

0:49:48.50 --> 0:49:48.960

Gene Harrington

They don't end.

0:49:48.970 --> 0:49:52.680

Gene Harrington

So I think June 7th UM.

0:49:52.870 --> 0:50:6.840

Gene Harrington

So we'll we'll have to see how that plays out, but it certainly does have a legitimate pants chance of passing the the Connecticut legislature and then the last thing I want to touch on is just a California specific issue.

0:50:7.650 --> 0:50:21.980

Gene Harrington

So similar to what happened at the federal level, the California Department of Pesticide Regulation did reject a petition asking them to regulate the new treated seeds.

0:50:22.950 --> 0:50:30.290

Gene Harrington

They were rejected that in the fall of 2020, in early 2023 or in February of this year.

0:50:31.20 --> 0:50:32.290

Gene Harrington

Umm, they were.

0:50:32.300 --> 0:50:51.610

Gene Harrington

They were sued for for not regulating neuronically treated seed and in addition, cow DPR is also engaged in rulemaking to more closely regulate, you know, how and when neonics can be used and nonac settings.

0:50:52.40 --> 0:51:2.440

Gene Harrington

But that room making does not cover treated seed and they they cite within the proposed rulemaking.

0:51:2.450 --> 0:51:4.530

Gene Harrington

Notice you know what?

0:51:4.540 --> 0:51:10.760

Gene Harrington

Why they chose not to include neuronically treated seed in that particular rulemaking?

0:51:14.980 --> 0:51:20.60

Gene Harrington

So that was all I I had prepared, you know, happy to answer any questions if if folks have any.

0:51:24.670 --> 0:51:27.730

890e564a-330e-47b0-8145-b77c5c15c61e

Do any of the Members online have any questions for Jim?

0:51:30.910 --> 0:51:31.590

890e564a-330e-47b0-8145-b77c5c15c61e

For anybody else.

0:51:35.140 --> 0:51:36.450

890e564a-330e-47b0-8145-b77c5c15c61e

Could Gene that was really good.

0:51:36.460 --> 0:51:44.200

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you very much, very thorough and that's a good overview of what other states are have done or are doing.

0:51:55.330 --> 0:51:55.490

Gene Harrington

Yeah.

0:51:57.990 --> 0:51:58.180

Gene Harrington

Yep.

0:51:46.360 --> 0:51:59.880

890e564a-330e-47b0-8145-b77c5c15c61e

Can you, when you send the PowerPoint, can you send the the bill numbers for the ones that are pending in New York, California, so we could it goes up to pay the full time trying to sort out their websites.

0:52:0.850 --> 0:52:1.200

Gene Harrington

Yeah.

0:52:1.210 --> 0:52:1.880

Gene Harrington

No, I could do that.

0:52:1.890 --> 0:52:4.320

Gene Harrington

I can do that and I I would just add one thing.

0:52:4.330 --> 0:52:9.900

Gene Harrington

You know that this presentation just covered laws and rules, but I I wouldn't note.

0:52:10.250 --> 0:52:22.130

Gene Harrington

You know there there are some states, I I don't have an exact number that do restrict the use of neonics insecticides or treated seed on lands that they manage.

0:52:22.310 --> 0:52:28.880

Gene Harrington

So an example is the Wisconsin Department of Natural Resources on land that's being farmed.

0:52:29.90 --> 0:52:38.600

Gene Harrington

It it does not allow neonics, insecticides or neuronic treated seeds on land, DNR land that is leased for farming.

0:52:40.80 --> 0:52:40.500

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:52:41.690 --> 0:52:41.910

Gene Harrington

It.

0:52:41.330 --> 0:52:42.270

890e564a-330e-47b0-8145-b77c5c15c61e

I think, yeah.

0:52:42.280 --> 0:52:44.300

890e564a-330e-47b0-8145-b77c5c15c61e

So this is like this is a lot for me.

0:52:44.310 --> 0:53:0.60

890e564a-330e-47b0-8145-b77c5c15c61e

And so in my mind, like maybe this is something that we can do internally, I'm trying to organize in my mind the difference between some of these, where it's only it's not related to seeds, it's only related to foliar spray.

0:53:0.70 --> 0:53:9.200

890e564a-330e-47b0-8145-b77c5c15c61e

And then by city and by like I'm picturing like a spreadsheet that would help my mind organize like the different kind of legislation that's going on.

0:53:9.210 --> 0:53:15.250

890e564a-330e-47b0-8145-b77c5c15c61e

So I would understand it better because that was like there was some things mixed in, right, some agriculture, some not.

0:53:15.260 --> 0:53:19.690

890e564a-330e-47b0-8145-b77c5c15c61e

And so that's where my brain is kind of like trying to flip it into a box.

0:53:19.700 --> 0:53:20.430

890e564a-330e-47b0-8145-b77c5c15c61e

We can do that.

0:53:20.440 --> 0:53:32.470

890e564a-330e-47b0-8145-b77c5c15c61e

I think obviously we haven't even started writing a report yet, but at some point when we write a report to legislature, we're going to want to summarize what other states have done and we can organize it in that way.

0:53:32.900 --> 0:53:48.540

890e564a-330e-47b0-8145-b77c5c15c61e

You know, then that's why this is really good information, because I think the legislation would be interested in what other states are doing because I know well, I was interested to see that the New York had some recent legislation, but then this other one is coming up.

0:53:48.690 --> 0:53:55.320

890e564a-330e-47b0-8145-b77c5c15c61e

I mean, I follow it like a little bit, but I think the the stuff that's pending now is different than obviously what happened before.

0:53:55.330 --> 0:54:1.410

890e564a-330e-47b0-8145-b77c5c15c61e

So it's just a lot for my brain to keep organized, but very informative and.

0:54:1.420 --> 0:54:8.650

890e564a-330e-47b0-8145-b77c5c15c61e

And then, Jane, one other sort of related question about the EPA ongoing assessment.

0:54:12.120 --> 0:54:13.50

890e564a-330e-47b0-8145-b77c5c15c61e

Are you?

0:54:13.280 --> 0:54:21.130

890e564a-330e-47b0-8145-b77c5c15c61e

I mean, obviously they'll publish whatever they publish for public comment, but are there work groups working on it or how?

0:54:21.230 --> 0:54:22.710

890e564a-330e-47b0-8145-b77c5c15c61e

Any idea how that's going?

0:54:23.80 --> 0:54:24.140

890e564a-330e-47b0-8145-b77c5c15c61e

What their process is?

0:54:25.200 --> 0:54:28.980

Gene Harrington

Not exactly sure how many work groups they have going on.

0:54:33.170 --> 0:54:33.480

890e564a-330e-47b0-8145-b77c5c15c61e

Umm.

0:54:28.990 --> 0:54:37.430

Gene Harrington

I mean, they have had a number of notice and comment periods where they they ask you, you know, the initial risk assessments and people comment on them.

0:54:42.450 --> 0:54:43.80

890e564a-330e-47b0-8145-b77c5c15c61e

June, they're like.

0:54:38.500 --> 0:54:52.950

Gene Harrington

You know, I I haven't reviewed the the risk assessments, but I assume they're like most risk assessments where they do include, you know, possible risk mitigation measures and you know people of have been submitting comments on on those.

0:54:53.700 --> 0:55:1.620

Gene Harrington

But I you know, I I don't know what other, you know, work groups they have besides just, you know, EPA staff working on them.

0:55:1.670 --> 0:55:10.950

Gene Harrington

I assume they're collaborating with USDA, but as far as you know, NGO workgroups, I I'm not sure of of that.

0:55:11.980 --> 0:55:12.830

890e564a-330e-47b0-8145-b77c5c15c61e

OK, alright.

0:55:13.140 --> 0:55:16.160

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, it's kind of a vague question on my part, so sorry.

0:55:18.830 --> 0:55:21.10

890e564a-330e-47b0-8145-b77c5c15c61e

OK, well that was really good.

0:55:21.20 --> 0:55:21.950

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you very much.

0:55:23.10 --> 0:55:24.900  
890e564a-330e-47b0-8145-b77c5c15c61e  
And if there are no other questions, we'll.

0:55:27.920 --> 0:55:29.320  
890e564a-330e-47b0-8145-b77c5c15c61e  
Thank you again and yeah.

0:55:29.330 --> 0:55:30.120  
890e564a-330e-47b0-8145-b77c5c15c61e  
Thank you, gene.

0:55:30.130 --> 0:55:32.300  
890e564a-330e-47b0-8145-b77c5c15c61e  
Thanks and talk to you later.

0:55:32.620 --> 0:55:32.940  
890e564a-330e-47b0-8145-b77c5c15c61e  
Yeah.

0:55:31.530 --> 0:55:33.120  
Gene Harrington  
The OR a.

0:55:33.10 --> 0:55:33.620  
890e564a-330e-47b0-8145-b77c5c15c61e  
Really welcome.

0:55:33.130 --> 0:55:34.550  
Gene Harrington  
Thanks for having me, Steve Morgan.

0:55:34.560 --> 0:55:34.860  
Gene Harrington  
Thank you.

0:55:34.710 --> 0:55:35.80  
890e564a-330e-47b0-8145-b77c5c15c61e  
Sure.

0:55:35.690 --> 0:55:36.230  
890e564a-330e-47b0-8145-b77c5c15c61e  
Alright. Thanks.

0:55:38.0 --> 0:55:43.330  
890e564a-330e-47b0-8145-b77c5c15c61e  
OK, we're almost right on schedule too for Jim.

0:55:48.300 --> 0:55:51.340

890e564a-330e-47b0-8145-b77c5c15c61e

To the I can send them right here.

0:55:53.700 --> 0:55:56.240

890e564a-330e-47b0-8145-b77c5c15c61e

Sorry, I thought I can choose.

0:55:57.550 --> 0:55:58.210

890e564a-330e-47b0-8145-b77c5c15c61e

You guys don't mind?

0:56:11.490 --> 0:56:12.200

890e564a-330e-47b0-8145-b77c5c15c61e

This one right?

0:56:12.250 --> 0:56:12.950

890e564a-330e-47b0-8145-b77c5c15c61e

You don't see that.

0:56:13.10 --> 0:56:13.590

890e564a-330e-47b0-8145-b77c5c15c61e

That's right.

0:56:14.30 --> 0:56:15.700

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, yeah.

0:56:15.750 --> 0:56:18.140

890e564a-330e-47b0-8145-b77c5c15c61e

I don't think that there's been any significant changes.

0:56:18.150 --> 0:56:21.380

890e564a-330e-47b0-8145-b77c5c15c61e

Also didn't was for on line after OK.

0:56:26.170 --> 0:56:29.900

890e564a-330e-47b0-8145-b77c5c15c61e

Is can everybody hear you or you want me to move on?

0:56:30.10 --> 0:56:31.580

890e564a-330e-47b0-8145-b77c5c15c61e

I wonder if you had a closure.

0:56:31.590 --> 0:56:32.360

890e564a-330e-47b0-8145-b77c5c15c61e

That's the speaker.

0:56:32.370 --> 0:56:33.340

890e564a-330e-47b0-8145-b77c5c15c61e  
The microphone.

0:56:33.690 --> 0:56:35.440

890e564a-330e-47b0-8145-b77c5c15c61e  
Yeah, there's one right in front of you too.

0:56:35.450 --> 0:56:37.920

890e564a-330e-47b0-8145-b77c5c15c61e  
It's kind of like a spike, like it has like, doing that.

0:56:38.390 --> 0:56:39.710

890e564a-330e-47b0-8145-b77c5c15c61e  
But you wanna sit where I am?

0:56:40.230 --> 0:56:43.420

890e564a-330e-47b0-8145-b77c5c15c61e  
No, it's the dynamic.

0:56:43.530 --> 0:56:45.400

890e564a-330e-47b0-8145-b77c5c15c61e  
Yeah, that little one, that's the speaker.

0:56:46.370 --> 0:56:48.880

890e564a-330e-47b0-8145-b77c5c15c61e  
If you can't hear me, just yell and I will try to.

0:56:48.930 --> 0:56:52.480

890e564a-330e-47b0-8145-b77c5c15c61e  
My diction is poor and my projection is worth right.

0:56:52.490 --> 0:56:53.590

890e564a-330e-47b0-8145-b77c5c15c61e  
Hold on because I have to.

0:56:57.790 --> 0:56:58.910

890e564a-330e-47b0-8145-b77c5c15c61e  
I don't want to see this.

0:57:2.360 --> 0:57:2.840

890e564a-330e-47b0-8145-b77c5c15c61e  
And.

0:57:13.850 --> 0:57:14.180

890e564a-330e-47b0-8145-b77c5c15c61e  
Alright.



0:57:14.190 --> 0:57:16.50

890e564a-330e-47b0-8145-b77c5c15c61e

Can everyone see that?

0:57:20.40 --> 0:57:21.650

890e564a-330e-47b0-8145-b77c5c15c61e

I'm not online, I'm not online.

0:57:23.60 --> 0:57:24.430

890e564a-330e-47b0-8145-b77c5c15c61e

Yes, yes.

0:57:25.360 --> 0:57:25.660

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

0:57:26.10 --> 0:57:26.250

DiPietro, Laura

Yep.

0:57:26.690 --> 0:57:27.740

890e564a-330e-47b0-8145-b77c5c15c61e

You OK?

0:57:27.990 --> 0:57:30.580

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, go ahead, Joe.

0:57:30.650 --> 0:57:35.720

890e564a-330e-47b0-8145-b77c5c15c61e

So I did as requested.

0:57:35.730 --> 0:58:2.200

890e564a-330e-47b0-8145-b77c5c15c61e

I believe it was Jonathan had mentioned looking into Doctor Archae's work on Neo, Nick and Snoid treated seed and fugitive dust, so I did a bit of a dive on studies that he was involved in or some of the people that were involved with studies that he had been lead on had taken an and worked up a little bit the first slide.

0:58:3.940 --> 0:58:28.220

890e564a-330e-47b0-8145-b77c5c15c61e

I did a bit of a review on just a brief YouTube presentation that Doctor Schaafsma did was an error view by person at a seed conference in which she basically says that dust off is primarily a machinery problem and his opinion was that the industry has two ways to mitigate liberated dust coming from planters.

0:58:29.420 --> 0:58:43.260

890e564a-330e-47b0-8145-b77c5c15c61e

His first suggestion was that air could be cleaned as it's drawn into the machinery, so the seed planter

machinery has an air intake and the 2nd that it could be cleaned as it the air is exhausted from the machine.

0:58:43.770 --> 0:58:48.540

890e564a-330e-47b0-8145-b77c5c15c61e

Or he said that their combination of these two processes could actually be applied.

0:58:48.550 --> 0:59:3.180

890e564a-330e-47b0-8145-b77c5c15c61e

And these solutions could eliminate 95% of the fugitive dust issue once the ground when they're planted in the ground, the treatments tend to stay close to where the the seed is planted, but the fugitive dust.

0:59:3.190 --> 0:59:7.810

890e564a-330e-47b0-8145-b77c5c15c61e

So that's that is admitted from the planter, is subject to being redistributed.

0:59:7.910 --> 0:59:13.580

890e564a-330e-47b0-8145-b77c5c15c61e

So either wind or rain or groundwater, we're erosion.

0:59:14.340 --> 0:59:23.80

890e564a-330e-47b0-8145-b77c5c15c61e

Umm was points for his concern and he did some experiments testing Veracrypt science.

0:59:24.80 --> 0:59:44.290

890e564a-330e-47b0-8145-b77c5c15c61e

I seed lubricant agent called Fluency and he demonstrated that the fluency product had a greater than 95% efficiency in the lab, but when he went out in the field that there was a 60% efficiency and this disparity, he believed, was due to the use of vacuum theaters.

0:59:45.460 --> 0:59:45.890

890e564a-330e-47b0-8145-b77c5c15c61e

Umm.

0:59:46.140 --> 1:0:4.90

890e564a-330e-47b0-8145-b77c5c15c61e

And we'll go into that a little bit more after he was questioned on the retrofit deflector units that Europe has applied and these do slow down the air intake into the machines and not necessarily sucking up as much dust into the intake of the machine, they don't.

1:0:5.180 --> 1:0:13.330

890e564a-330e-47b0-8145-b77c5c15c61e

Necessarily reduce remove it from the error they deposited the seed treatment onto the soil surface.

1:0:13.670 --> 1:0:14.770

890e564a-330e-47b0-8145-b77c5c15c61e

It does the dust.

1:0:14.820 --> 1:0:15.270

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

1:0:15.280 --> 1:0:26.90

890e564a-330e-47b0-8145-b77c5c15c61e

So the neonicotinoid contaminated dust will get put down on the soil surface instead of blowing it out, which some people are concerned about it being blown in the air.

1:0:26.100 --> 1:0:33.170

890e564a-330e-47b0-8145-b77c5c15c61e

His feeling was the still of the potential problem because that you haven't eliminated redistribution of the neonicotinoid product.

1:0:33.500 --> 1:0:34.910

890e564a-330e-47b0-8145-b77c5c15c61e

It's still there and available.

1:0:37.0 --> 1:0:39.100

890e564a-330e-47b0-8145-b77c5c15c61e

We can go one more more again.

1:0:40.970 --> 1:0:46.460

890e564a-330e-47b0-8145-b77c5c15c61e

So his ideas for no, that's alright.

1:0:47.150 --> 1:0:47.640

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you.

1:0:47.650 --> 1:1:0.560

890e564a-330e-47b0-8145-b77c5c15c61e

There his ideas for consideration by the equipment manufacturers as well as the seed treatments themselves, is to make those seed coatings more abrasive resistant.

1:1:1.70 --> 1:1:12.270

890e564a-330e-47b0-8145-b77c5c15c61e

The theory being that the dust from the soil that that you're working over comes into the machine rubs the coating off the seed.

1:1:12.280 --> 1:1:35.510

890e564a-330e-47b0-8145-b77c5c15c61e

So making that coating more abrasive resistant, adding a second coating on top to to give another little jacket of protection over that and then using both filters on the intake so that you're reducing the amount of seed or soil that gets intake taking into the machine as well as that on the exhaust air of the planters.

1:1:35.520 --> 1:1:38.790

890e564a-330e-47b0-8145-b77c5c15c61e

So that we're cleaning the air as it goes back out into the atmosphere.

1:1:39.860 --> 1:1:57.220

890e564a-330e-47b0-8145-b77c5c15c61e

Another suggestion was use of cyclone machines to clean the exhaust air prior to its release into the atmosphere, and then the last he wasn't real thrilled about plant applying the doves with the use of a Coulter planter, but I'm I'm I don't understand that lessons.

1:1:58.630 --> 1:2:8.160

890e564a-330e-47b0-8145-b77c5c15c61e

So what they would do is the exhaust seed treatment would actually get lined into a row behind the machine.

1:2:8.170 --> 1:2:12.380

890e564a-330e-47b0-8145-b77c5c15c61e

So it deposited back into the soil, actually planting the.

1:2:12.590 --> 1:2:14.660

890e564a-330e-47b0-8145-b77c5c15c61e

So there's sort of planting and as they go.

1:2:14.670 --> 1:2:20.930

890e564a-330e-47b0-8145-b77c5c15c61e

So it's not necessarily around the seeds like the jacket or the seed, but it's planted into the furrow as they go along.

1:2:24.950 --> 1:2:35.430

890e564a-330e-47b0-8145-b77c5c15c61e

And the next slide, field crop news did a little bit of a blurb neonicotinoid contaminated dust and pollinator exposure during planting.

1:2:35.440 --> 1:2:51.730

890e564a-330e-47b0-8145-b77c5c15c61e

These are the results from a study that upcoming but Tracy Bowe or Tracy Bout Umm was involved in this and and so here is a little bit of the corn Dust Research Consortium.

1:2:52.220 --> 1:3:29.950

890e564a-330e-47b0-8145-b77c5c15c61e

Did a study of seed treatments to determine the available flowering resources during corn planting around corn fields around the time of planting to evaluate fluency agent so that their product and reducing the the neonicotinoid contaminated dust from the manifolds as their example vacuum cleaner vacuum planters, not vacuum cleaners, vacuum planters are exhausting and then they did a cooperative investigation to determine other potential routes for exposures for pollinators.

1:3:31.880 --> 1:3:32.430

890e564a-330e-47b0-8145-b77c5c15c61e

They pair.

1:3:32.440 --> 1:3:36.390

890e564a-330e-47b0-8145-b77c5c15c61e

It had nine paired fields planted with conventional lubricant.

1:3:36.440 --> 1:3:47.480

890e564a-330e-47b0-8145-b77c5c15c61e

So, umm, conventional lubricants used in the states tend to be called for graphite and then the bear fluency agent is a specific product that bear puts out.

1:3:49.180 --> 1:3:57.180

890e564a-330e-47b0-8145-b77c5c15c61e

They did a preseason motor and they conducted umm this monitoring within two to three kilometers of the study fields.

1:3:57.730 --> 1:4:9.580

890e564a-330e-47b0-8145-b77c5c15c61e

So they started before the the actual planting began, and then they continued from planting to the week six and they scouted for pollen and dead bees and they identified them and did it.

1:4:9.590 --> 1:4:20.280

890e564a-330e-47b0-8145-b77c5c15c61e

A residue analysis on anything that they found, and they also we're trying to evaluate what types of pollen were available to the pollinators at the time of planting.

1:4:21.760 --> 1:4:23.380

890e564a-330e-47b0-8145-b77c5c15c61e

We can go ahead and one more.

1:4:25.10 --> 1:4:28.630

890e564a-330e-47b0-8145-b77c5c15c61e

So they determined that the the pollinators had available to them.

1:4:28.640 --> 1:4:29.900

890e564a-330e-47b0-8145-b77c5c15c61e

Willows maples.

1:4:30.550 --> 1:4:31.820

890e564a-330e-47b0-8145-b77c5c15c61e

Rosacea family.

1:4:31.830 --> 1:4:33.260

890e564a-330e-47b0-8145-b77c5c15c61e

So that's the Hawthorne.

1:4:33.770 --> 1:4:39.440

890e564a-330e-47b0-8145-b77c5c15c61e

Umm and apples as well as dandelions.

1:4:39.450 --> 1:4:43.700

890e564a-330e-47b0-8145-b77c5c15c61e

But the dandelions were only a small portion of what was collected by the study.

1:4:43.710 --> 1:4:54.10

890e564a-330e-47b0-8145-b77c5c15c61e

But these pollen resources reflect those identified in two other State University studies, Iowa State and Ohio State University.

1:4:54.20 --> 1:5:2.700

890e564a-330e-47b0-8145-b77c5c15c61e

Both did studies and they found the same the same availability to their their pollinators as well.

1:5:4.510 --> 1:5:25.40

890e564a-330e-47b0-8145-b77c5c15c61e

Umm, so they did try to capture the neonicotinoid dust along the field edge with towers, and they also were looking at offsite dot as well, figuring that the heavier particles would get distributed closer to the field and then the lighter particles would be available for.

1:5:26.260 --> 1:5:45.460

890e564a-330e-47b0-8145-b77c5c15c61e

Movement off field site and they destablished a correlation between the neonicotinoid dust escaping from the actual speed planters and the downwind levels found on dandelions, suggesting that planters have a direct effect on what is found in and on the flowering resources downwind.

1:5:46.850 --> 1:5:51.400

890e564a-330e-47b0-8145-b77c5c15c61e

There was also suggestion that other residue exposures might be standing water.

1:5:51.810 --> 1:6:6.340

890e564a-330e-47b0-8145-b77c5c15c61e

The soil at the top five centimeters of the soil surface and then in dry dust layer being stirred up by the actual movement of the equipment through the field and then some inversion corn pollen.

1:6:6.350 --> 1:6:7.270

890e564a-330e-47b0-8145-b77c5c15c61e

Add path Ling.

1:6:9.840 --> 1:6:20.880

890e564a-330e-47b0-8145-b77c5c15c61e

These were alternate routes of exposure and they captured neonicotinoid residue, but at several magnitudes lower than those that they actually found escaping from the plants.

1:6:20.890 --> 1:6:21.120  
890e564a-330e-47b0-8145-b77c5c15c61e  
Or so.

1:6:21.130 --> 1:6:23.580  
890e564a-330e-47b0-8145-b77c5c15c61e  
These are signed minor players in the Pittsburgh.

1:6:25.660 --> 1:6:31.150  
890e564a-330e-47b0-8145-b77c5c15c61e  
This research basically made them conclude that they needed to reduce the amount of dust overall.

1:6:31.400 --> 1:6:32.600  
890e564a-330e-47b0-8145-b77c5c15c61e  
Is that published somewhere?

1:6:33.740 --> 1:6:37.530  
890e564a-330e-47b0-8145-b77c5c15c61e  
This study, yeah, this is field crop news is, yeah.

1:6:37.540 --> 1:6:38.60  
890e564a-330e-47b0-8145-b77c5c15c61e  
Journalism.

1:6:38.70 --> 1:6:41.10  
890e564a-330e-47b0-8145-b77c5c15c61e  
Yeah, they're the paper.

1:6:41.120 --> 1:6:42.280  
890e564a-330e-47b0-8145-b77c5c15c61e  
There is a paper.

1:6:42.290 --> 1:6:50.680  
890e564a-330e-47b0-8145-b77c5c15c61e  
This is your review paper on this is a summary of a peer reviewed paper, so I have that paper.

1:6:50.850 --> 1:6:51.710  
890e564a-330e-47b0-8145-b77c5c15c61e  
Do you have the power?

1:6:51.890 --> 1:6:52.330  
890e564a-330e-47b0-8145-b77c5c15c61e  
Yeah.

1:6:52.390 --> 1:6:59.240  
890e564a-330e-47b0-8145-b77c5c15c61e  
And next one, but you can find this in April 2016.

1:6:59.610 --> 1:7:2.690

890e564a-330e-47b0-8145-b77c5c15c61e

That's field crop news.

1:7:2.810 --> 1:7:6.470

890e564a-330e-47b0-8145-b77c5c15c61e

I believe it's cited online too.

1:7:8.40 --> 1:7:15.790

890e564a-330e-47b0-8145-b77c5c15c61e

There's Lincoln, top of the PowerPoint, so here is what global growers can do to mitigate drugs drift at planting.

1:7:15.800 --> 1:7:17.590

890e564a-330e-47b0-8145-b77c5c15c61e

This is another field crop news.

1:7:17.600 --> 1:7:20.620

890e564a-330e-47b0-8145-b77c5c15c61e

There are suggestions, sorry, sorry.

1:7:20.630 --> 1:7:23.350

890e564a-330e-47b0-8145-b77c5c15c61e

One more, but yeah.

1:7:25.120 --> 1:7:28.10

890e564a-330e-47b0-8145-b77c5c15c61e

So again, this is Tracy Valente.

1:7:29.430 --> 1:7:53.130

890e564a-330e-47b0-8145-b77c5c15c61e

So the the previous study that was described was one that she participated in, and this is another summary from her through field crop News, basically suggesting that growers can use those fluency agent to reduce dust and stay away from the talker graphite which they felt added an extra layer of abrasion on to the treatment.

1:7:54.370 --> 1:8:1.60

890e564a-330e-47b0-8145-b77c5c15c61e

They can adapt their equipment to direct exhaust air from the planter, fan downward to the ground.

1:8:1.120 --> 1:8:3.520

890e564a-330e-47b0-8145-b77c5c15c61e

Again, we'll talk about that a little later.

1:8:3.530 --> 1:8:6.720

890e564a-330e-47b0-8145-b77c5c15c61e

That's still leaving it subject for you distribution.



1:8:8.170 --> 1:8:15.810

890e564a-330e-47b0-8145-b77c5c15c61e

They're suggesting good practices to alert beekeepers in your area prior to you planting and allowing them time to relocate their hives.

1:8:16.940 --> 1:8:24.860

890e564a-330e-47b0-8145-b77c5c15c61e

And then adapting conservation tillage practices to limit the loss of soil which has those neonicotinoid residues in it.

1:8:26.40 --> 1:8:41.110

890e564a-330e-47b0-8145-b77c5c15c61e

Following IPM's and using only treated seed when indicated and then before planting control the actual blooming weeds around your fields and in your fields so that that reduces the pollinators attraction to your field.

1:8:42.290 --> 1:8:58.70

890e564a-330e-47b0-8145-b77c5c15c61e

Also suggested a final additional steps might be to do a seed coat and to filter the air taken by seed planters, again eliminating the dust from entering in as well as the exhaust dust from being extruded out of the machine.

1:9:0.390 --> 1:9:0.790

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

1:9:2.590 --> 1:9:21.120

890e564a-330e-47b0-8145-b77c5c15c61e

So this is a study there, this is a peer reviewed study on Paul later or quantifying neonicotinoid residues escaping from planters during Macy's product or maize planting.

1:9:22.330 --> 1:9:51.560

890e564a-330e-47b0-8145-b77c5c15c61e

And the reason for this study was that the combination of pneumatic planters, so those vacuum planters, plus the near universal use of neonicotinoid treated may seeds with the concerns about acute being mortality led to the, umm, questioning as to what the role numatic planters has in contaminated seed exhaust during the planted planting process.

1:9:53.320 --> 1:10:7.390

890e564a-330e-47b0-8145-b77c5c15c61e

So researchers noted ahead of time that in reviewing prior to their study, a German study reported emissions from neumatic planters with neonet treated seeds about 4% of the applied dose.

1:10:7.450 --> 1:10:31.830

890e564a-330e-47b0-8145-b77c5c15c61e

So between 3 and 4 grams of active ingredient were found per hectare and then in Italian, study reported ranges of .43 to 1.53 grams per hectare or about umm I have to 1.85% of the actual seed treatment applied to the maze.

1:10:33.340 --> 1:10:43.860

890e564a-330e-47b0-8145-b77c5c15c61e

And then North America, again, we use that talk and graphite typically added to the seedbox to help lubricate the seed as it moves through the planting equipment.

1:10:43.920 --> 1:10:53.340

890e564a-330e-47b0-8145-b77c5c15c61e

And this also acts as an abrasive when it comes in contact with that seed, so stuff friction livering some of that treatment off of it.

1:10:54.700 --> 1:11:7.970

890e564a-330e-47b0-8145-b77c5c15c61e

Umm possible routes of release for that neonicotinoid treatment on the seed include the actual planting process, routine cleaning of the equipment after it's been used to plant Unix feeds.

1:11:8.690 --> 1:11:12.640

890e564a-330e-47b0-8145-b77c5c15c61e

And then a notation that the conditions starting planting.

1:11:12.650 --> 1:11:15.960

890e564a-330e-47b0-8145-b77c5c15c61e

So a dry, windy, windy day when they're out.

1:11:15.970 --> 1:11:30.600

890e564a-330e-47b0-8145-b77c5c15c61e

Planting may actually enhance that spread of fugitive dust, and there are suggesting that a reduced rate of the fan air flow might by 30% may reduce dust emission by more than 80%.

1:11:32.700 --> 1:11:36.560

890e564a-330e-47b0-8145-b77c5c15c61e

So as we move forward, this is that short review.

1:11:36.900 --> 1:11:38.210

890e564a-330e-47b0-8145-b77c5c15c61e

One more slide, please.

1:11:38.220 --> 1:11:45.590

890e564a-330e-47b0-8145-b77c5c15c61e

Morgan, this short review that Tracy Boutte had made appears to tie into this.

1:11:45.680 --> 1:11:55.650

890e564a-330e-47b0-8145-b77c5c15c61e

They did 9 Ontario operators and then in 2014 they tried to retain those same cooperators.

1:11:55.660 --> 1:12:8.590

890e564a-330e-47b0-8145-b77c5c15c61e

But because of the mandated crop rotation set up in Ontario, they retained only a portion of them and only got a couple new participants.

1:12:8.600 --> 1:12:11.90

890e564a-330e-47b0-8145-b77c5c15c61e

So they only had 10 fields enrolled at next year.

1:12:12.430 --> 1:12:22.630

890e564a-330e-47b0-8145-b77c5c15c61e

They did do a random soil sampling before planting, and they use the ATV's to plow through the the.

1:12:24.300 --> 1:12:39.240

890e564a-330e-47b0-8145-b77c5c15c61e

The fields to be planted and they matched up planting speeds so that they could sort of standardize all the tests on all the field sizes were standardized to 100 meter distance for and that was what considered a single plants or row.

1:12:41.850 --> 1:12:49.690

890e564a-330e-47b0-8145-b77c5c15c61e

They had dust, sticky traps again to capture some of that, that seed treatment liberated close to the field.

1:12:50.610 --> 1:12:59.760

890e564a-330e-47b0-8145-b77c5c15c61e

And then they standardize the time of collection that these were out for all the fields, and they analyzed the samples for clothianidin.

1:12:59.810 --> 1:13:2.150

890e564a-330e-47b0-8145-b77c5c15c61e

I am Assocham and azine.

1:13:4.570 --> 1:13:6.260

890e564a-330e-47b0-8145-b77c5c15c61e

If we can go one more, Morgan.

1:13:6.590 --> 1:13:12.150

890e564a-330e-47b0-8145-b77c5c15c61e

Sorry, it's really hard to take notes and do this, didn't I can stay close, no.

1:13:15.190 --> 1:13:20.520

890e564a-330e-47b0-8145-b77c5c15c61e

The neonicotinoid residues and does generated by planting maze with newmatic planters.

1:13:20.650 --> 1:13:33.920

890e564a-330e-47b0-8145-b77c5c15c61e

Average loss was about 05 grams per hectare, so 95% of this was a seed treatment residue with only about 4.2% from the actual soil itself.

1:13:33.930 --> 1:13:42.120

890e564a-330e-47b0-8145-b77c5c15c61e

So in soils that have been previously planted with neonicotinoid seed, there is a little bit of a of retention in the soil.

1:13:43.380 --> 1:13:46.190

890e564a-330e-47b0-8145-b77c5c15c61e

Umm, the treatment rate of the seeds.

1:13:46.200 --> 1:13:48.70

890e564a-330e-47b0-8145-b77c5c15c61e

So how much seed was actually a?

1:13:48.240 --> 1:13:50.700

890e564a-330e-47b0-8145-b77c5c15c61e

How much treatment is actually applied to the seed?

1:13:50.710 --> 1:13:51.330

890e564a-330e-47b0-8145-b77c5c15c61e

This reflects.

1:13:51.340 --> 1:14:2.430

890e564a-330e-47b0-8145-b77c5c15c61e

What about .21% was lost in the 2014 study of mean recovery of .43, or .44, almost of seat applied.

1:14:2.440 --> 1:14:6.900

890e564a-330e-47b0-8145-b77c5c15c61e

Neonicotinoids were collected via the exhaust filter bag.

1:14:8.220 --> 1:14:28.900

890e564a-330e-47b0-8145-b77c5c15c61e

Umm, there's a note here that there is a previous study that recovered tenfold more, but they used a commercial car air filter and what was actually used in this was a vacuum cleaner bag over the exhaust so that there may be a difference between the type of filter as well as the types of planters.

1:14:28.950 --> 1:14:37.600

890e564a-330e-47b0-8145-b77c5c15c61e

But Doctor Schaff must study used planters, treatments and lubricants that were used in the Great Lakes region of North America.

1:14:37.670 --> 1:14:42.580

890e564a-330e-47b0-8145-b77c5c15c61e

So sort of, they're looking at what what we're looking at is the same thing.

1:14:46.660 --> 1:14:54.960

890e564a-330e-47b0-8145-b77c5c15c61e

And so total neonicotinoid residues in the dust plume average about .1 microgram per.

1:14:56.530 --> 1:14:57.480

890e564a-330e-47b0-8145-b77c5c15c61e

Cubic meter.

1:14:58.110 --> 1:15:3.980

890e564a-330e-47b0-8145-b77c5c15c61e

This is greater than the previous report has been exhaust from 5 meters from the outlet planter.

1:15:3.990 --> 1:15:18.450

890e564a-330e-47b0-8145-b77c5c15c61e

Fan fans and research determined that 95% of the neonicotinoid residues list released during planting with pneumatic planters came directly from the seasons themselves, while the remainder was from the disturbed fields.

1:15:18.460 --> 1:15:46.430

890e564a-330e-47b0-8145-b77c5c15c61e

Soils, they need to say, suggest there is need to mitigate release and need to void dust from the spoiled dust containing neonicotinoid residues from previous applications from entering the vacuum plants or so again that intake the dry dust entering into that seed chamber where the seeds actually getting a braided and then any added tow causing abrasion on to that seat coding itself.

1:15:49.290 --> 1:15:55.130

890e564a-330e-47b0-8145-b77c5c15c61e

And moving on their suggesting the following steps to improve.

1:15:55.760 --> 1:16:11.580

890e564a-330e-47b0-8145-b77c5c15c61e

Ohh dust reduction, so suggesting that manufacturers develop codings to improve the adherence of the active ingredient to the actual seed, reducing abrasion from your either the calc or surface dust from entering the vacuum.

1:16:11.590 --> 1:16:17.370

890e564a-330e-47b0-8145-b77c5c15c61e

The air stream from removing the active ingredient from the planter exhaust.

1:16:17.380 --> 1:16:29.720

890e564a-330e-47b0-8145-b77c5c15c61e

They'll filtering the exhaust air and then adopting conservation tillage practices to sort of reduce the overall soil disturbance before, during and after the planting was neonicotinoid fees.

1:16:30.970 --> 1:16:37.160

890e564a-330e-47b0-8145-b77c5c15c61e

And they felt their results show that well over 95% of the exposure to non target organisms.

1:16:37.910 --> 1:16:45.570

890e564a-330e-47b0-8145-b77c5c15c61e

So anybody that is not in the ground with the seed umm originates from the exhaust during planting.

1:16:48.620 --> 1:16:49.160

890e564a-330e-47b0-8145-b77c5c15c61e

One more.

1:16:52.280 --> 1:17:5.770

890e564a-330e-47b0-8145-b77c5c15c61e

Umm, so here's a little bit more of a dive on another paper that Doctor Schaff must published the role of field dust and pesticide drift.

1:17:5.780 --> 1:17:16.240

890e564a-330e-47b0-8145-b77c5c15c61e

When pesticide maize seeds are planted with vacuum type planters, so again a lot of this is a redo of the previous stuff because these were all tied in together as far as I could tell.

1:17:17.400 --> 1:17:28.250

890e564a-330e-47b0-8145-b77c5c15c61e

But when he tested the fluency for Bayer crop science, he observed that the field levels of fugitive contaminated dust were greater than laboratory.

1:17:28.260 --> 1:17:36.50

890e564a-330e-47b0-8145-b77c5c15c61e

And so this is where he came with that hypothesis, that it was the seed being a braided by field dust that caused the problem.

1:17:37.770 --> 1:17:38.440

890e564a-330e-47b0-8145-b77c5c15c61e

And he knows that.

1:17:40.400 --> 1:17:42.470

890e564a-330e-47b0-8145-b77c5c15c61e

Uh, several other researchers.

1:17:42.480 --> 1:17:45.390

890e564a-330e-47b0-8145-b77c5c15c61e

So not yens returns.

1:17:45.650 --> 1:17:47.540

890e564a-330e-47b0-8145-b77c5c15c61e

Excuse me if I didn't pronounce your name.

1:17:48.110 --> 1:18:1.510

890e564a-330e-47b0-8145-b77c5c15c61e

You said deflectors does help reduce windspeed and redirect the emissions from the planter, but it while it might reduce the drift by 3070%, it's still depositing it on the soil surface.

1:18:1.520 --> 1:18:8.630

890e564a-330e-47b0-8145-b77c5c15c61e

So again, it's still leaving it for redistribution, depending on whether events, erosion, etcetera.

1:18:10.580 --> 1:18:11.0

890e564a-330e-47b0-8145-b77c5c15c61e

Uh.

1:18:11.10 --> 1:18:12.50

890e564a-330e-47b0-8145-b77c5c15c61e

Another outfit?

1:18:12.700 --> 1:18:32.740

890e564a-330e-47b0-8145-b77c5c15c61e

Study the use of the cyclone apparatus and using that to actually apply them into the soil furl, and they're they're feeling was that while it did lead to nearly 100%, recast or the draw bug track was that the cyclone system was very capital intensive.

1:18:32.750 --> 1:18:38.290

890e564a-330e-47b0-8145-b77c5c15c61e

So it was quite costly and it probably was not within a budget of a normal farmer.

1:18:40.350 --> 1:18:54.160

890e564a-330e-47b0-8145-b77c5c15c61e

Bianca also came up with a less capital intensive option, which was the use of filtering recirculating system that reproduced near 85% efficiency and reducing the fugitive dust emission.

1:18:54.860 --> 1:19:4.260

890e564a-330e-47b0-8145-b77c5c15c61e

But this was causing them to need to replace filters potentially and then what do you do with spent filters with the neonicotinoid contaminant in it?

1:19:4.310 --> 1:19:6.350

890e564a-330e-47b0-8145-b77c5c15c61e

So there's other drawbacks there.

1:19:8.130 --> 1:19:14.940

890e564a-330e-47b0-8145-b77c5c15c61e

So earlier research had focused on the speed treatment dust emanating from seed to seed contacts.

1:19:14.950 --> 1:19:24.720

890e564a-330e-47b0-8145-b77c5c15c61e

Which Doctor Schaff must belief was that the abrasion of the seat is actually enhanced with the exposure to the field dust and the lubricants that have been traditionally used.

1:19:27.710 --> 1:19:43.580

890e564a-330e-47b0-8145-b77c5c15c61e

And the next objection, objectives of this study were to characterize the role of the field dust quantify the amount of dust involved in the contamination and discernment to determine what extent the dust could be practically mitigated.

1:19:44.610 --> 1:20:1.30

890e564a-330e-47b0-8145-b77c5c15c61e

And then another side one was to talk about whether the addition of surrogate dust to testing method, the ESA hubac protocol would increase the resolution of testing for anti abrasive properties to see coding.

1:20:1.120 --> 1:20:21.380

890e564a-330e-47b0-8145-b77c5c15c61e

So that ESA, you've got protocol from what I gather and there might be smarter people out in our audience that could help me out is testing these sees themselves to see how well the coding adheres on to them and they sort of run them through a system and they capture whatever is emitted off the seed.

1:20:21.390 --> 1:20:25.280

890e564a-330e-47b0-8145-b77c5c15c61e

But what Doctor Shasa felt was that there should be a test.

1:20:25.550 --> 1:20:33.680

890e564a-330e-47b0-8145-b77c5c15c61e

They in his test, they actually used umm a sort of pseudo soil.

1:20:34.390 --> 1:20:36.320

890e564a-330e-47b0-8145-b77c5c15c61e

They use dysgenesis earth.

1:20:36.530 --> 1:20:47.520

890e564a-330e-47b0-8145-b77c5c15c61e

Put it into this testing mechanism so that the seed actually was being abraded by something similar to dust, but it was a standardized size so that they could see how well feed treatments here.

1:20:47.530 --> 1:20:52.410

890e564a-330e-47b0-8145-b77c5c15c61e

So something that the manufacturers could do to perfect their codings.

1:20:53.680 --> 1:20:59.490

890e564a-330e-47b0-8145-b77c5c15c61e

And again, the details are pretty much the same in this.

1:20:59.500 --> 1:21:3.100

890e564a-330e-47b0-8145-b77c5c15c61e

I won't go into the equipment that they used as standard piece of equipment.

1:21:3.360 --> 1:21:26.370

890e564a-330e-47b0-8145-b77c5c15c61e

They also applied the seed in a standard rate to all seeds, and the testing and they had when they tested it in the dust meter to evaluate the the efficacy of the treatment on the scene in the lab, they used a flow right product that's available publicly.

1:21:26.780 --> 1:21:42.630

890e564a-330e-47b0-8145-b77c5c15c61e

There was a product X that was used and then that product X didn't was it 1 coating and then a second code over the seeds treatment when it was nearly dry.

1:21:42.640 --> 1:21:44.390

890e564a-330e-47b0-8145-b77c5c15c61e

So they used three batches.



1:21:45.20 --> 1:21:52.190

890e564a-330e-47b0-8145-b77c5c15c61e

One was flow right, one was product X, one was product X and then an extra overcoat over product X.

1:21:55.440 --> 1:21:59.790

890e564a-330e-47b0-8145-b77c5c15c61e

And so if we move along, umm again.

1:22:1.590 --> 1:22:6.650

890e564a-330e-47b0-8145-b77c5c15c61e

These were sample air samples collected in 2014 to 2016.

1:22:7.780 --> 1:22:10.840

890e564a-330e-47b0-8145-b77c5c15c61e

Umm, you know, essentially what they had done.

1:22:10.850 --> 1:22:12.450

890e564a-330e-47b0-8145-b77c5c15c61e

It was a fixed vacuum cleaner.

1:22:12.460 --> 1:22:18.250

890e564a-330e-47b0-8145-b77c5c15c61e

Bags on all the vents in the seed metering units and on copper backs lids.

1:22:18.360 --> 1:22:19.540

890e564a-330e-47b0-8145-b77c5c15c61e

They steal the tubing.

1:22:21.320 --> 1:22:28.10

890e564a-330e-47b0-8145-b77c5c15c61e

They drew air into the planter with a special pipe that they had put above the equipment.

1:22:28.60 --> 1:22:52.270

890e564a-330e-47b0-8145-b77c5c15c61e

So about four meters and through an added filter and the goal was to not necessarily reduce the air intake into the machine, so not change too much of what was going on, but to see changing direction and then so the seeds were dressed for the field portion in an additional polymer coated and the fluency product was used at the labeled rate.

1:22:53.170 --> 1:22:55.560

890e564a-330e-47b0-8145-b77c5c15c61e

And so if we can get two more again.

1:22:57.730 --> 1:23:14.400

890e564a-330e-47b0-8145-b77c5c15c61e

So they've measured that field dust entering the vacuum system had a positive effect on the total amount of clothianidin captured in the filter bags, and that there was a strong positive linear relationship in the lab between the amounts of side dust which they use.

1:23:14.410 --> 1:23:31.400

890e564a-330e-47b0-8145-b77c5c15c61e

Diatomaceous earth added with the seeds and the amount that of the treatment recovered in the filters, so comparing seed laws so they did use two separate seed lots, some previous studies and they're out there.

1:23:31.410 --> 1:23:32.420

890e564a-330e-47b0-8145-b77c5c15c61e

I can't tell you what they are.

1:23:32.430 --> 1:23:45.840

890e564a-330e-47b0-8145-b77c5c15c61e

I've looked at some of them from other countries where there were saying that different seed lots shed treatment at different rates, so there is no main or interactive effects attributed to.

1:23:45.850 --> 1:23:52.130

890e564a-330e-47b0-8145-b77c5c15c61e

See lot in the lab when the sea lots and polymer treatments were compared using dust recovered as a parameter.

1:23:53.130 --> 1:24:12.670

890e564a-330e-47b0-8145-b77c5c15c61e

First seed treatments where there was no dust added in the protocol shows that there was no effect attributable to the seesaw polymer used or their interaction, so there was, however, an interaction between the polymer treatment and the dust added when product X was double applied, there was slightly less.

1:24:12.920 --> 1:24:46.600

890e564a-330e-47b0-8145-b77c5c15c61e

The dust request recovered overall, so having that extra coding in the face of being abraded did provide some level of reduction in neonet release, and there there are feeling was the mean reduction in fugitive clothianidin achieved was approximately 98% when they employed various mitigation strategies and found that that's a tactic that they've promoted basically is not just one but multiple strategies.

1:24:49.450 --> 1:24:52.540

890e564a-330e-47b0-8145-b77c5c15c61e

Ohm and we can go one more. More than.

1:24:52.550 --> 1:24:52.950

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you.

1:24:54.720 --> 1:25:9.250

890e564a-330e-47b0-8145-b77c5c15c61e

Feel those entering the plant through this embraces to seed treatments and increases the amount of treatment via exhaust about 12.6% of the active ingredient is lost in the worst case scenario and 2.6 as an average.

1:25:11.30 --> 1:25:23.490

890e564a-330e-47b0-8145-b77c5c15c61e

There have been some previous AH work that have recovered different amounts, but they also said that there was some differences that the John Deere planters compared to the planters they were using.

1:25:23.540 --> 1:25:35.230

890e564a-330e-47b0-8145-b77c5c15c61e

Had it lower negative pressure used less air volume, and who had a slower air speed and they didn't write a readily lend themselves to seals when they were using the filter bags.

1:25:35.240 --> 1:25:42.520

890e564a-330e-47b0-8145-b77c5c15c61e

So the the kinze planters that skin can see planters that reused had a much higher power system.

1:25:43.460 --> 1:25:55.430

890e564a-330e-47b0-8145-b77c5c15c61e

Umm, they got a a more seed abrasion, but they also lend themselves better to a tighter fit with a vacuum plate planter bags as opposed to the John Deere planter.

1:25:55.440 --> 1:25:57.830

890e564a-330e-47b0-8145-b77c5c15c61e

So it's just a matter of difference of equipment.

1:26:0.60 --> 1:26:5.970

890e564a-330e-47b0-8145-b77c5c15c61e

They found that residues bound on soil from the applications from previous years also contributed portions.

1:26:5.980 --> 1:26:15.250

890e564a-330e-47b0-8145-b77c5c15c61e

So again, in that short study we we said that 4.2% of what's being exhausted by the machine was probably coming from that previous year's treatment.

1:26:16.760 --> 1:26:21.60

890e564a-330e-47b0-8145-b77c5c15c61e

And then there are three cases of residue escapes greater than 3 grams.

1:26:21.500 --> 1:26:26.190

890e564a-330e-47b0-8145-b77c5c15c61e

Umm per hectare and one exceeding 4 grams.

1:26:26.400 --> 1:26:36.210

890e564a-330e-47b0-8145-b77c5c15c61e

And that suggests that the amount of active ingredient escaped the vacuum planners is greater than they've ever originally believed in, proportional to the amount of steel dust entering the system.

1:26:37.500 --> 1:26:45.500

890e564a-330e-47b0-8145-b77c5c15c61e

But they also point to certain characteristics such certain characteristics, such as the soil texture and the availability.

1:26:45.510 --> 1:26:51.850

890e564a-330e-47b0-8145-b77c5c15c61e

So the type of tillage that was used or the soil moisture and the dust may worsen in certain situations.

1:26:55.310 --> 1:27:0.980

890e564a-330e-47b0-8145-b77c5c15c61e

Again, similar results were found when they were using a stationary plants around the lab.

1:27:1.430 --> 1:27:19.400

890e564a-330e-47b0-8145-b77c5c15c61e

Amount of dust recovered was 80% of what was applied and that the amount as the amount of dust entering the system increased the concentration of the clothianidin decrease, suggesting that at a certain point there's a saturation where they're adding more dust is not going to change the result.

1:27:20.300 --> 1:27:25.570

890e564a-330e-47b0-8145-b77c5c15c61e

This phenomena was repeated again when they're comparing their their measurements to field studies.

1:27:25.960 --> 1:27:45.500

890e564a-330e-47b0-8145-b77c5c15c61e

So umm, the client Vienna then declined a lot of logarithmically as they recovered more dust than the plants are exhaust and then noting again that that dust meter testing system that they were introducing is accurate and precise unearth conditions that it was meant to operate.

1:27:47.360 --> 1:27:56.590

890e564a-330e-47b0-8145-b77c5c15c61e

They feel that it under that system underestimates the the risk of contaminated dust risk because it doesn't take into account the dust from the field.

1:27:56.600 --> 1:28:7.600

890e564a-330e-47b0-8145-b77c5c15c61e

So that's why they're proposing using a, umm, a pseudo dust that might simulate that seed being exposed to field dust and planting.

1:28:9.210 --> 1:28:12.320

890e564a-330e-47b0-8145-b77c5c15c61e

And then we probably go through two more Morgan.

1:28:14.680 --> 1:28:29.70

890e564a-330e-47b0-8145-b77c5c15c61e

Umm, the goal of mitigating pesticide drives during planters is but goal and mitigating pesticide drift during planting was back in planters by greater than 90 percent.

1:28:29.360 --> 1:28:44.170

890e564a-330e-47b0-8145-b77c5c15c61e

95% is really realistic and achievable in their estimation, but they suggest that filtering the exhaust air was the main contributing factor to this 98% reduction in the fugitive clothianidin.

1:28:44.180 --> 1:28:50.610

890e564a-330e-47b0-8145-b77c5c15c61e

Richie, we achieve getting losing my voice here and my mind.

1:28:51.280 --> 1:29:0.740

890e564a-330e-47b0-8145-b77c5c15c61e

So there are suggesting a combination of the strategies being employed deployed in tandem to achieve the goal of could tailing pesticide drift during planting.

1:29:2.10 --> 1:29:16.170

890e564a-330e-47b0-8145-b77c5c15c61e

And so again using see clean air to go into this feature or the plants are scrubbing the exhaust air as it goes out.

1:29:16.530 --> 1:29:40.710

890e564a-330e-47b0-8145-b77c5c15c61e

And then improving the actual treatment polymers on the seed and how well that they are adhered, any sort of neonics or adhered to the seed so that we're doing two things we're one not taking it off the street to begin with and then others either not exposing it into the atmosphere or leaving on the soil surface where it can be redistributed.

1:29:43.180 --> 1:29:44.780

890e564a-330e-47b0-8145-b77c5c15c61e

And that is what I have read.

1:29:48.70 --> 1:29:48.760

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you.

1:29:49.110 --> 1:29:50.0

890e564a-330e-47b0-8145-b77c5c15c61e

You're welcome.

1:29:50.510 --> 1:29:51.730

890e564a-330e-47b0-8145-b77c5c15c61e

So I have a question.

1:29:52.630 --> 1:29:56.780

890e564a-330e-47b0-8145-b77c5c15c61e

So mostly, studies are a few years old, or five years or so.

1:29:56.870 --> 1:29:58.20

890e564a-330e-47b0-8145-b77c5c15c61e

Has there been anything recent?

1:29:58.30 --> 1:30:1.920

890e564a-330e-47b0-8145-b77c5c15c61e

You know, I haven't seen anything.

1:30:2.710 --> 1:30:13.90

890e564a-330e-47b0-8145-b77c5c15c61e

I've been working with our state library and then doing a lot of Google Scholar searches, and there's not a whole lot.

1:30:14.130 --> 1:30:22.790

890e564a-330e-47b0-8145-b77c5c15c61e

I think Doctor Chasma and Doctor Boutte could probably tell us more clearly what might be in the states.

1:30:23.170 --> 1:30:33.400

890e564a-330e-47b0-8145-b77c5c15c61e

Some of the things that I have print it out for my next batch of stuff are more in the line of reductions through I PM.

1:30:33.670 --> 1:30:34.750

890e564a-330e-47b0-8145-b77c5c15c61e

OK, OK.

1:30:35.800 --> 1:30:38.930

890e564a-330e-47b0-8145-b77c5c15c61e

And someone that is old and some of it is not so old.

1:30:39.220 --> 1:30:39.780

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

1:30:39.820 --> 1:30:40.420

890e564a-330e-47b0-8145-b77c5c15c61e

Alright, thank you.

1:30:42.520 --> 1:30:46.830

890e564a-330e-47b0-8145-b77c5c15c61e

And say Ryan, right?

1:30:46.40 --> 1:30:49.10

Ryan Rebozo

I I think I had a a same question along those same lines.

1:30:49.240 --> 1:30:57.920

Ryan Rebozo

Since these studies have been out for a couple of years, I wonder if we have a sense of if some of these strategies are already being adopted, and if not, what might be limiting that.

1:31:0.510 --> 1:31:3.560

890e564a-330e-47b0-8145-b77c5c15c61e

I think I had a brief exchange with Heather.

1:31:3.570 --> 1:31:25.150

890e564a-330e-47b0-8145-b77c5c15c61e

It might be worth seeing what she's found, cause I think Heather Darby has done quite a bit of searching to find how to how to employ some of these and I and I don't know, to be honest, I haven't seen a whole lot when I've sort of poked around to see what, if anything, from the manufacturers is out there.

1:31:25.950 --> 1:31:32.340

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, I think that's a question, Morgan, to put on the for future or for a subsequent meeting.

1:31:32.410 --> 1:31:33.900

890e564a-330e-47b0-8145-b77c5c15c61e

That's that's the specific question is.

1:31:34.470 --> 1:31:34.800

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

1:31:34.810 --> 1:31:42.190

890e564a-330e-47b0-8145-b77c5c15c61e

How have these ideas been implemented, and in particular how they are they being implemented in Vermont?

1:31:42.510 --> 1:31:46.0

890e564a-330e-47b0-8145-b77c5c15c61e

You know, so that would be something that we need to find out is.

1:31:46.290 --> 1:31:49.220

890e564a-330e-47b0-8145-b77c5c15c61e

So Heather, not so Heather's on right now.

1:31:49.230 --> 1:31:52.710

890e564a-330e-47b0-8145-b77c5c15c61e

Now, and she's was going to kind of touch upon.

1:31:54.330 --> 1:32:0.280

890e564a-330e-47b0-8145-b77c5c15c61e

Her own experience trying to source the kit and things like that so I don't.

1:32:0.290 --> 1:32:1.700

890e564a-330e-47b0-8145-b77c5c15c61e

Heather, are you there?

1:32:1.710 --> 1:32:2.280

890e564a-330e-47b0-8145-b77c5c15c61e

Can you hear us?

1:32:6.400 --> 1:32:7.270

Heather Darby

Yeah.

1:32:7.330 --> 1:32:8.180

Heather Darby

Can you hear me?

1:32:8.900 --> 1:32:9.670

890e564a-330e-47b0-8145-b77c5c15c61e

Yes, we can.

1:32:12.890 --> 1:32:13.380

Heather Darby

Yeah.

1:32:13.490 --> 1:32:16.380

Heather Darby

Yeah, I'm up at the the research farm.

1:32:16.390 --> 1:32:26.820

Heather Darby

So yeah, I was gonna just provide an update on what is happening with all the projects that we had started to.

1:32:27.530 --> 1:32:29.930

Heather Darby

Umm, implement and then.

1:32:31.300 --> 1:32:31.920

Heather Darby

Umm.

1:32:32.120 --> 1:32:37.570

Heather Darby

Also talk about or follow up on some of the items that were just discussed a little bit.

1:32:37.580 --> 1:32:41.700

Heather Darby

So I don't have any slides to share.

1:32:45.380 --> 1:32:45.800

890e564a-330e-47b0-8145-b77c5c15c61e

The.



1:32:41.770 --> 1:32:48.310

Heather Darby

I didn't have enough time to put anything together, but I can talk about thus far.

1:32:48.320 --> 1:33:11.890

Heather Darby

What what we've been doing so all of our on farm UMM studies have been planted with treated corn versus untreated corn with the exception of 1 site that will hopefully be planted this week.

1:33:12.20 --> 1:33:18.530

Heather Darby

So those sites have UM corn that we were able to secure.

1:33:18.540 --> 1:33:24.270

Heather Darby

That didn't have any neonics on it, but still had fungicide seed treatment.

1:33:24.640 --> 1:33:30.910

Heather Darby

And then we purchased the same variety that was fully treated.

1:33:32.160 --> 1:33:36.600

Heather Darby

So that has been put out on the farms prior to planting.

1:33:36.610 --> 1:34:3.670

Heather Darby

We did put out wire worm bait traps, which is one of the pests that the Neo Nexus being used to control, so we put out bait traps two weeks prior to planting so that we could see what the wire worm pressure was at the different sites, and those were all removed before planting.

1:34:3.780 --> 1:34:8.370

Heather Darby

And you know, we calculated the number of wireworms etcetera.

1:34:8.660 --> 1:34:25.700

Heather Darby

And then we've also put out seed corn, maggot fly, sticky traps to basically look at seeing the corn maggot populations and flights, which is certainly it's been interesting.

1:34:25.750 --> 1:34:31.390

Heather Darby

Ohh, lot of the corn around the state has been put in the ground.

1:34:33.340 --> 1:34:37.230

Heather Darby

You know, the last week was a great week.

1:34:37.240 --> 1:34:39.550

Heather Darby

The week before that was pretty good too.

1:34:40.670 --> 1:34:46.650

Heather Darby

And then the weather continues, at least in most parts of the state, to look very dry.

1:34:46.660 --> 1:34:49.510

Heather Darby

So most of all, the corn should be planted.

1:34:49.760 --> 1:34:55.680

Heather Darby

You know, really in the next week, but I would say last week was a really big week.

1:34:56.470 --> 1:35:3.760

Heather Darby

Umm for people to plant corn and I would say for many farms a lot of that work is done.

1:35:4.840 --> 1:35:5.300

Heather Darby

Umm.

1:35:6.110 --> 1:35:15.340

Heather Darby

And on the two research sites, we have also started the planning date study.

1:35:15.350 --> 1:35:28.100

Heather Darby

So we're planning corn at different dates to see treated and untreated and monitoring the seed corn maggot populations or flights to look at corn damage.

1:35:28.390 --> 1:35:34.510

Heather Darby

And I'm not 100% certain, but I think the peak flight was actually.

1:35:36.650 --> 1:35:50.670

Heather Darby

Earlier last week, at least in the islands, at least in Alberg, we have sticky traps out in Addison County, and we have some up in Franklin County where it's a bit colder.

1:35:51.750 --> 1:35:56.70

Heather Darby

And, but I would say definitely at our traps here at the research farm.

1:35:57.710 --> 1:36:5.900

Heather Darby

The end of the first week of May, there were 250 seed corn maggot flies on the traps.

1:36:6.430 --> 1:36:11.440

Heather Darby

And then at the end very end of last week, there were 85.

1:36:11.490 --> 1:36:18.400

Heather Darby

And then I just checked them today and you know that number will probably be cut in half again this week.

1:36:18.410 --> 1:36:22.820

Heather Darby

So at least in, you know, somewhat warmer parts of Vermont.

1:36:22.830 --> 1:36:44.540

Heather Darby

The peak flight did seem to be timed near where most of the farmers actually we're planting, but we'll see again because we've we are planning corn every week to basically and look at the damage across time and we'll see, you know, we'll see what happens.

1:36:46.470 --> 1:36:54.280

Heather Darby

Some of the first corn we planted is starting to come out of the ground now, so we'll be scouting that corn.

1:36:54.610 --> 1:36:57.80

Heather Darby

Uh, probably at the end of next week.

1:36:57.90 --> 1:37:12.60

Heather Darby

Once it gets a little bit bigger to look at losses from the seed corn maggot in the treated and untreated seed and also our at the farm sites, we've also been collecting soil.

1:37:12.70 --> 1:37:15.460

Heather Darby

We've collected two sets of soil samples so far.

1:37:15.470 --> 1:37:19.90

Heather Darby

We collected a baseline sample before.

1:37:21.520 --> 1:37:31.650

Heather Darby

Before the corn was planted and we measured that sample that to two depths to get sort of background.

1:37:33.30 --> 1:37:38.360

Heather Darby

Possible residues and then we sampled again.

1:37:38.370 --> 1:37:53.260

Heather Darby

The two research sites just after planting, umm, in both cases, you know roughly about four or five days after planting, and then we'll we're planning to sample.

1:37:53.720 --> 1:37:54.370

Heather Darby

Excuse me.

1:37:54.380 --> 1:38:16.350

Heather Darby

Sample again umm throughout the season as far as water samples, we have collected a very few and part of that is because we haven't really gotten any rain so we did manage to get a couple of samples after planning but not as many as we had hoped because there you know we haven't.

1:38:16.530 --> 1:38:19.210

Heather Darby

Like I said, we haven't had any rainfall really up here.

1:38:21.420 --> 1:38:21.830

Heather Darby

Yeah.

1:38:21.880 --> 1:38:43.230

Heather Darby

So as so those those are the trials, the projects are mostly in the ground and we're doing the monitoring umm, as far as planters and activities that were happening prior to this work and prior to.

1:38:44.430 --> 1:38:50.130

Heather Darby

Umm well, just prior or currently the.

1:38:50.320 --> 1:39:2.560

Heather Darby

As I mentioned, the last time we spoke, this really hasn't been a major, I would say educational topic in the farming community.

1:39:3.660 --> 1:39:23.200

Heather Darby

So the practices that were mentioned earlier about, you know, dust management on planners, I'm some of the fluency you know, sort of amendments that can be applied to the seed potentially to reduce dust etcetera.

1:39:23.250 --> 1:39:46.950

Heather Darby

I mean, I'll be honest, I think farmers largely have no idea, you know, and we started talking with some of the farmer groups a month ago about, Umm, basically making planner modifications and people were really interested and excited about it.

1:39:46.960 --> 1:40:5.250

Heather Darby

It's something they didn't really know about, didn't realize that they could do and so that I think the interest is there, but it's really getting, you know, some options, some realistic practical options into their hands.

1:40:5.660 --> 1:40:11.720

Heather Darby

You know, many of the planters are pneumatic planners out there.

1:40:12.880 --> 1:40:19.810

Heather Darby

You know, sort of my rough estimate is probably 60 to 70% now of the planners operate in that way.

1:40:21.60 --> 1:40:26.90

Heather Darby

So you know it is in some ways relatively low hanging fruit.

1:40:26.100 --> 1:40:38.210

Heather Darby

If we can come up with some again, you know, sort of practical, realistic systems that we can help farmers obtain and install.

1:40:38.440 --> 1:40:51.510

Heather Darby

And So what I was talking to Morgan about was that our our plan at this point is to install a couple different systems on our UVM planners.

1:40:51.520 --> 1:40:53.870

Heather Darby

We have two newmatic planners.

1:40:53.880 --> 1:41:29.50

Heather Darby

Actually, we have three have different sizes and scales and working on that over the summer so that we can highlight that at our summer field day here in alburg and then also use that as learning for us to be able to guide farmers in you know, making those modifications themselves kind of what what's working, what's not you know just even bringing it up in conversation quickly with the farmers at a couple of the watershed meetings.

1:41:29.60 --> 1:41:35.530

Heather Darby

You know, there were a lot of questions that came up about management of those systems, some of the things that were already talked about.

1:41:35.590 --> 1:41:39.560

Heather Darby

Well, what do we do once we have all the day, you know, these cartridges, etcetera.

1:41:39.850 --> 1:41:51.930

Heather Darby

So I think there's, uh, there's a lot of interest, especially given the results that can be obtained in in, you know, putting this into practice.

1:41:51.940 --> 1:41:56.530

Heather Darby

But you know, we have some leg work to do on for the farmers.

1:41:56.540 --> 1:42:3.70

Heather Darby

I think to really help them come up with those practical, you know, solutions.

1:42:3.340 --> 1:42:9.490

Heather Darby

So we're working on that, like I said, and the literature review was really helpful.

1:42:9.500 --> 1:42:12.770

Heather Darby

I would agree there doesn't seem to have been much done.

1:42:12.780 --> 1:42:14.460

Heather Darby

It feels like there was a big push.

1:42:15.350 --> 1:42:16.700

Heather Darby

Umm, you know what?

1:42:16.710 --> 1:42:24.150

Heather Darby

Especially when Ontario put their rules into place and since then it doesn't appear that there's been a whole lot of research.

1:42:24.160 --> 1:42:29.450

Heather Darby

So I think we can really help start moving this forward and be an example.

1:42:29.700 --> 1:42:32.410

Heather Darby

Certainly for you know other places as well.

1:42:33.260 --> 1:42:49.770

Heather Darby

We also have not found a kit we kind of thought that, especially in in Canada, that there would already be after market kits or you know the companies would have kits at the farmers could buy.

1:42:49.860 --> 1:42:52.70

Heather Darby

But that doesn't seem to be the case.

1:42:51.540 --> 1:42:52.70

890e564a-330e-47b0-8145-b77c5c15c61e

The.

1:42:52.580 --> 1:42:57.470

Heather Darby

It was alluded to in a few articles, but we just we never found anything.

1:42:57.480 --> 1:43:6.730

Heather Darby

So we are gonna have to, you know, really fabricate our own things and, you know, different brands of planners are different.

1:43:7.80 --> 1:43:13.790

Heather Darby

So that will pose I don't wanna say some challenges, but it certainly may.

1:43:13.940 --> 1:43:16.610

Heather Darby

We have three different types of planners at UVM.

1:43:16.620 --> 1:43:20.370

Heather Darby

We have a John Deere, a white and a minosa some.

1:43:20.380 --> 1:43:26.80

Heather Darby

So I think it's a good range of, you know, the different planners that farmers also have.

1:43:27.400 --> 1:43:33.420

Heather Darby

So I think that's at least our next our next step in education and outreach.

1:43:38.350 --> 1:43:38.920

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you, Heather.

1:43:40.580 --> 1:43:40.760

Heather Darby

Yeah.

1:43:40.980 --> 1:43:42.950

890e564a-330e-47b0-8145-b77c5c15c61e

Really, really interesting.

1:43:43.60 --> 1:43:44.90

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

1:43:44.170 --> 1:43:44.360

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

1:43:45.650 --> 1:43:54.580

890e564a-330e-47b0-8145-b77c5c15c61e

Heather, this Steve, if so from the board members wanted to come out and see your research and see what you're doing.

1:43:54.590 --> 1:44:3.840

890e564a-330e-47b0-8145-b77c5c15c61e

When would be a good time to, you know, not not have it as regular part of the meeting, but have a a day where Members come out and we can talk.

1:44:3.850 --> 1:44:5.570

890e564a-330e-47b0-8145-b77c5c15c61e

Look at what you're doing and how it's going.

1:44:7.320 --> 1:44:7.520

Heather Darby

Yeah.

1:44:10.290 --> 1:44:10.760

890e564a-330e-47b0-8145-b77c5c15c61e

The.

1:44:8.560 --> 1:44:11.290

Heather Darby

Yeah, we talked about this with Morgan a little bit.

1:44:11.300 --> 1:44:16.910

Heather Darby

It will be a big part of our annual field day, so people are definitely welcome to come to that.

1:44:16.920 --> 1:44:20.990

Heather Darby

That'll be until July 2720.

1:44:21.0 --> 1:44:29.920

Heather Darby

7th we cover a lot of topics, but that will be a special focus in the afternoon that will spend a lot of time on umm.



1:44:30.380 --> 1:44:30.870

Heather Darby

So.

1:44:30.930 --> 1:44:32.830

Heather Darby

So that's a date that's already set.

1:44:32.840 --> 1:44:35.0

Heather Darby

Outside of that, we're certainly welcome.

1:44:35.40 --> 1:44:41.780

Heather Darby

You know, you're welcome to come up umm as a group and see what's happening.

1:44:41.830 --> 1:44:47.130

Heather Darby

You know, the research is happening at different locations and visually.

1:44:51.310 --> 1:44:51.910

890e564a-330e-47b0-8145-b77c5c15c61e

Not much to see.

1:44:48.230 --> 1:44:52.540

Heather Darby

You know, there's with the sticky.

1:44:52.870 --> 1:44:56.350

Heather Darby

Yeah, there's, I mean, it's Kyle would be kind of boring really, I think.

1:44:58.660 --> 1:44:59.590

890e564a-330e-47b0-8145-b77c5c15c61e

Watching grass grow.

1:44:57.240 --> 1:44:59.770

Heather Darby

Umm ah, right.

1:44:59.780 --> 1:45:8.360

Heather Darby

I mean, yes, I it's a conversations, you know, I mean we will be kind of we'll start scouting the corn here again like I said in about a week.

1:45:9.50 --> 1:45:9.740

Heather Darby

Umm.

1:45:9.970 --> 1:45:13.360

Heather Darby

And then after that, things won't really look much different.

1:45:14.410 --> 1:45:14.610

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

1:45:30.980 --> 1:45:31.240

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

1:45:13.370 --> 1:45:33.50

Heather Darby

You know umm, but I think I would say coming to the field day and having the board interact with the farming community and hearing feedback and really understanding challenges, opportunities, hearing the questions, I think that would be really, really great for the board.

1:45:33.960 --> 1:45:34.220

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

1:45:35.690 --> 1:45:41.200

Heather Darby

As well as the farmers, you know, to really understand what's happening, they're hearing it now, right?

1:45:41.210 --> 1:45:55.10

Heather Darby

They're just hearing about the new rules that are going into place, you know, so there are definitely a lot of questions, but it for the majority of farms, it's a very, very new topic.

1:45:56.260 --> 1:46:2.370

Heather Darby

So the education needs needs to get out there and that's what we're hoping to really focus on.

1:46:3.570 --> 1:46:3.860

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

1:46:3.870 --> 1:46:12.500

890e564a-330e-47b0-8145-b77c5c15c61e

Well, we can certainly you make sure all the board members are aware of the field day and all that and you know make that a point of emphasis.

1:46:13.850 --> 1:46:15.350

890e564a-330e-47b0-8145-b77c5c15c61e

When is our meeting in July anyway?

1:46:16.430 --> 1:46:18.230  
890e564a-330e-47b0-8145-b77c5c15c61e  
It's the Monday of that week.

1:46:18.670 --> 1:46:23.60  
890e564a-330e-47b0-8145-b77c5c15c61e  
OK, the 20, so 24, right, I think OK.

1:46:23.70 --> 1:46:24.590  
890e564a-330e-47b0-8145-b77c5c15c61e  
And the field days on what Thursday?

1:46:27.410 --> 1:46:27.630  
Heather Darby  
Yeah.

1:46:27.740 --> 1:46:28.160  
890e564a-330e-47b0-8145-b77c5c15c61e  
Exactly.

1:46:29.10 --> 1:46:29.470  
890e564a-330e-47b0-8145-b77c5c15c61e  
OK.

1:46:29.510 --> 1:46:30.300  
890e564a-330e-47b0-8145-b77c5c15c61e  
Alright, great.

1:46:30.310 --> 1:46:33.450  
890e564a-330e-47b0-8145-b77c5c15c61e  
Well, we'll we'll have an opportunity to talk about it then a couple more times.

1:46:34.610 --> 1:46:35.790  
890e564a-330e-47b0-8145-b77c5c15c61e  
Yeah, right. Great.

1:46:34.760 --> 1:46:39.350  
Heather Darby  
But, and I would say, you're definitely welcome to come up at anytime.

1:46:39.700 --> 1:46:43.420  
Heather Darby  
I I'm not that I'm trying to not have you come up.

1:46:43.430 --> 1:46:43.730  
Heather Darby  
You're.

1:46:43.740 --> 1:46:44.850

Heather Darby

You're certainly welcome.

1:46:44.860 --> 1:46:50.610

Heather Darby

I I think mostly I just need to know a date and I can let you know if it works for us, you know?

1:46:50.990 --> 1:46:51.290

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

1:46:50.700 --> 1:46:54.260

Heather Darby

But yeah, OK.

1:46:51.300 --> 1:46:55.770

890e564a-330e-47b0-8145-b77c5c15c61e

Well, we'll, we'll talk about it and see, but I think the 27th makes a lot of sense.

1:46:56.880 --> 1:46:57.40

Heather Darby

Yeah.

1:46:56.290 --> 1:46:57.890

890e564a-330e-47b0-8145-b77c5c15c61e

I have one logistics question.

1:46:57.900 --> 1:47:3.260

890e564a-330e-47b0-8145-b77c5c15c61e

Heather, do you do you have to register for the field day or can you just come to, you know, do we need to have people?

1:47:3.390 --> 1:47:6.690

Heather Darby

Well, it would be nice to get a list of people that are coming.

1:47:7.710 --> 1:47:7.950

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

1:47:15.760 --> 1:47:16.970

890e564a-330e-47b0-8145-b77c5c15c61e

That's what I was figuring.

1:47:17.440 --> 1:47:17.770

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

1:47:17.920 --> 1:47:18.170

890e564a-330e-47b0-8145-b77c5c15c61e

Yep.

1:47:7.660 --> 1:47:18.260

Heather Darby

Umm yes, we do have registration because we have a big lunch and everything, so we need to know who's coming for lunch more or less.

1:47:18.830 --> 1:47:20.670

Heather Darby

Yeah, that's that's.

1:47:19.70 --> 1:47:21.780

890e564a-330e-47b0-8145-b77c5c15c61e

Is that I feel like I haven't really seen that.

1:47:21.790 --> 1:47:25.80

890e564a-330e-47b0-8145-b77c5c15c61e

Is that on your lab page to register?

1:47:25.20 --> 1:47:27.600

Heather Darby

To be on our conference.

1:47:28.710 --> 1:47:29.550

Heather Darby

Workshop.

1:47:30.500 --> 1:47:30.840

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

1:47:29.560 --> 1:47:31.520

Heather Darby

I can send it to you if you don't see it there.

1:47:32.480 --> 1:47:33.490

890e564a-330e-47b0-8145-b77c5c15c61e

OK, I'll look and.

1:47:32.630 --> 1:47:35.550

Heather Darby

It's on the website, under workshops and conferences, yeah.

1:47:36.160 --> 1:47:36.420

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

1:47:45.870 --> 1:47:46.630  
890e564a-330e-47b0-8145-b77c5c15c61e  
OK, perfect.

1:47:48.920 --> 1:47:49.440  
890e564a-330e-47b0-8145-b77c5c15c61e  
Thank you for.

1:47:48.450 --> 1:48:1.720  
Heather Darby  
But yeah, I mean, I felt like you M needs to set the example of having their planner dust free first so that we can be able to show that it's feasible and doable.

1:48:1.730 --> 1:48:7.110  
Heather Darby  
And what it costs and where we got the parts and all those kind of things, so yeah.

1:48:7.960 --> 1:48:8.890  
890e564a-330e-47b0-8145-b77c5c15c61e  
Yeah, we're great.

1:48:9.520 --> 1:48:10.280  
890e564a-330e-47b0-8145-b77c5c15c61e  
I have a question.

1:48:10.370 --> 1:48:10.720  
890e564a-330e-47b0-8145-b77c5c15c61e  
OK.

1:48:21.770 --> 1:48:22.30  
Heather Darby  
No.

1:48:12.280 --> 1:48:22.710  
890e564a-330e-47b0-8145-b77c5c15c61e  
Heather did when you reached out to manufacturers, did they have any idea what you were talking about when you, like, called John Deere and said, hey, I'm looking for this, that anybody.

1:48:23.260 --> 1:48:23.730  
890e564a-330e-47b0-8145-b77c5c15c61e  
OK.

1:48:24.320 --> 1:48:24.720  
890e564a-330e-47b0-8145-b77c5c15c61e  
Thank you.

1:48:26.150 --> 1:48:26.760  
Heather Darby  
Yeah.

1:48:26.770 --> 1:48:34.650

Heather Darby

I mean, most of what we saw too was Syngenta was, you know, helping with these kits up in Canada.

1:48:34.660 --> 1:48:36.690

Heather Darby

And so we tried to reach out to them.

1:48:36.700 --> 1:48:48.730

Heather Darby

It was, you know, we weren't reaching out in Canada where reaching out to the Syngenta folks, we know here in you know the region, but people were largely oblivious.

1:48:50.610 --> 1:48:54.220

Heather Darby

So it's it's not people aren't talking about it.

1:48:56.30 --> 1:48:56.700

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you.

1:48:57.640 --> 1:48:57.840

Heather Darby

Yeah.

1:48:56.930 --> 1:48:58.150

890e564a-330e-47b0-8145-b77c5c15c61e

That's enlightening.

1:49:2.260 --> 1:49:2.460

Heather Darby

So.

1:49:6.170 --> 1:49:11.80

890e564a-330e-47b0-8145-b77c5c15c61e

Any more questions for Heather before we let her go back to her busy day?

1:49:11.150 --> 1:49:12.840

890e564a-330e-47b0-8145-b77c5c15c61e

So thank you for taking the time, Heather.

1:49:12.850 --> 1:49:13.60

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

1:49:13.70 --> 1:49:13.840

890e564a-330e-47b0-8145-b77c5c15c61e

Really appreciate it.

1:49:13.310 --> 1:49:13.880

Heather Darby  
Yeah.

1:49:13.890 --> 1:49:14.850

Heather Darby  
Thank thanks.

1:49:17.90 --> 1:49:19.380

Heather Darby  
OK, have a great afternoon.

1:49:18.290 --> 1:49:19.610

890e564a-330e-47b0-8145-b77c5c15c61e  
Looks like I don't see anything.

1:49:20.590 --> 1:49:21.0

890e564a-330e-47b0-8145-b77c5c15c61e  
Yeah.

1:49:21.10 --> 1:49:21.400

890e564a-330e-47b0-8145-b77c5c15c61e  
Thank you.

1:49:21.410 --> 1:49:22.230

890e564a-330e-47b0-8145-b77c5c15c61e  
You too later.

1:49:22.270 --> 1:49:22.930

890e564a-330e-47b0-8145-b77c5c15c61e  
Alright thanks.

1:49:24.200 --> 1:49:24.440

Heather Darby  
Bye.

1:49:25.670 --> 1:49:29.890

890e564a-330e-47b0-8145-b77c5c15c61e  
OK, so pretty much right on time.

1:49:30.410 --> 1:49:35.330

890e564a-330e-47b0-8145-b77c5c15c61e  
Yep, let's check in with the with the any of the board members have any questions or comments at this point.

1:49:40.300 --> 1:49:42.780

890e564a-330e-47b0-8145-b77c5c15c61e  
That pretty much a packed meeting here.



1:49:44.350 --> 1:49:46.570

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, So what?

1:49:48.480 --> 1:49:51.110

890e564a-330e-47b0-8145-b77c5c15c61e

Next work plan stays.

1:49:51.520 --> 1:49:52.830

890e564a-330e-47b0-8145-b77c5c15c61e

What's next? Yeah.

1:49:56.270 --> 1:49:58.860

890e564a-330e-47b0-8145-b77c5c15c61e

One thing I just wanted to ask the board members that are here.

1:49:58.870 --> 1:50:0.260

890e564a-330e-47b0-8145-b77c5c15c61e

I didn't ask at the beginning.

1:50:0.320 --> 1:50:3.200

890e564a-330e-47b0-8145-b77c5c15c61e

I didn't hear any changes to the Minutes that were.

1:50:4.90 --> 1:50:4.820

890e564a-330e-47b0-8145-b77c5c15c61e

Umm.

1:50:5.50 --> 1:50:9.40

890e564a-330e-47b0-8145-b77c5c15c61e

Sent out, but does anybody have any umm.

1:50:11.340 --> 1:50:12.480

890e564a-330e-47b0-8145-b77c5c15c61e

Can't see chat or people?

1:50:14.550 --> 1:50:17.540

890e564a-330e-47b0-8145-b77c5c15c61e

I don't think we will, Clarice, better hand up.

1:50:18.680 --> 1:50:19.960

Cutler, Clarice

Hi, yeah, this is Claris.

1:50:25.70 --> 1:50:25.790

890e564a-330e-47b0-8145-b77c5c15c61e

Ohh you did.

1:50:20.130 --> 1:50:26.870

Cutler, Clarice

Umm, I did send a note on page 7, yeah.

1:50:28.190 --> 1:50:29.420

890e564a-330e-47b0-8145-b77c5c15c61e

And I think I fixed that one.

1:50:29.430 --> 1:50:30.40

890e564a-330e-47b0-8145-b77c5c15c61e

You did do that?

1:50:30.620 --> 1:50:31.630

Cutler, Clarice

OK, super.

1:50:31.640 --> 1:50:31.960

Cutler, Clarice

Thank you.

1:50:30.90 --> 1:50:32.120

890e564a-330e-47b0-8145-b77c5c15c61e

Sorry. Yep.

1:50:41.940 --> 1:50:43.200

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you for reminding me, Claire.

1:50:47.980 --> 1:50:49.0

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

1:50:49.470 --> 1:50:53.690

890e564a-330e-47b0-8145-b77c5c15c61e

So then what's coming up?

1:50:58.500 --> 1:50:58.880

890e564a-330e-47b0-8145-b77c5c15c61e

Excuse me.

1:50:58.890 --> 1:51:0.900

890e564a-330e-47b0-8145-b77c5c15c61e

Excuse me a little disjointed so we have.

1:51:2.300 --> 1:51:3.420

890e564a-330e-47b0-8145-b77c5c15c61e

If we go chronologically.

1:51:4.940 --> 1:51:10.300

890e564a-330e-47b0-8145-b77c5c15c61e

We have quite a few people that are available to speak to the board in June and July.

1:51:11.850 --> 1:51:25.430

890e564a-330e-47b0-8145-b77c5c15c61e

So in June, the person Tracy bawdy, that Jill time summarize some of her work is going to come and talk to us.

1:51:25.440 --> 1:51:29.100

890e564a-330e-47b0-8145-b77c5c15c61e

If she works for the Ontario.

1:51:30.860 --> 1:51:45.110

890e564a-330e-47b0-8145-b77c5c15c61e

I forget what that acronym stands for, but basically, Ministry of Agriculture, Food, something, something that that that's a something better as ours that is, yeah.

1:51:45.180 --> 1:51:45.340

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

1:51:45.950 --> 1:51:52.320

890e564a-330e-47b0-8145-b77c5c15c61e

Ohm so I I I think that was something that was asked for by the board.

1:51:52.330 --> 1:51:54.110

890e564a-330e-47b0-8145-b77c5c15c61e

If I think it's great, it will touch on.

1:51:54.150 --> 1:52:4.610

890e564a-330e-47b0-8145-b77c5c15c61e

She has a lot of we have some of her research was included in that initial lit review that was pointed out and and proposed by members.

1:52:4.620 --> 1:52:6.770

890e564a-330e-47b0-8145-b77c5c15c61e

So he's coming for sure.

1:52:7.140 --> 1:52:13.190

890e564a-330e-47b0-8145-b77c5c15c61e

The other group that we know is coming for sure is pioneer seed.

1:52:14.450 --> 1:52:26.250

890e564a-330e-47b0-8145-b77c5c15c61e

Our representatives from Corteva, that is the we got a preview of this type of kind of logistics of treated seeds.

1:52:26.260 --> 1:52:45.380

890e564a-330e-47b0-8145-b77c5c15c61e

So how the to get at the question of the availability of treated seed that's on our work plan, so they the two are men that we met with at Porteau brothers are going to speak in June with us about that.

1:52:45.450 --> 1:53:0.700

890e564a-330e-47b0-8145-b77c5c15c61e

And then we've also asked we're we've been working a little bit with having another corteva representative come in to talk a little a little bit about the economic benefits and efficiency of seed treatment.

1:53:0.710 --> 1:53:2.620

890e564a-330e-47b0-8145-b77c5c15c61e

So that's another one of our topics.

1:53:3.800 --> 1:53:9.960

890e564a-330e-47b0-8145-b77c5c15c61e

And so right now we're trying to combine those two because it's corteva.

1:53:9.970 --> 1:53:11.740

890e564a-330e-47b0-8145-b77c5c15c61e

So we're trying to have those together.

1:53:11.990 --> 1:53:18.860

890e564a-330e-47b0-8145-b77c5c15c61e

I don't have a name yet for that combination, so I'm gonna continue to work on that for June.

1:53:18.870 --> 1:53:29.840

890e564a-330e-47b0-8145-b77c5c15c61e

And then the second part of addressing that economic impact of sea treatments, we have Elson Shields, who is retired now.

1:53:29.850 --> 1:53:39.840

890e564a-330e-47b0-8145-b77c5c15c61e

He was metrologist from Cornell, and he has a paper that was also in our kind of lit review shared reference list.

1:53:40.410 --> 1:53:47.150

890e564a-330e-47b0-8145-b77c5c15c61e

So it's about specifically seed corn maggot and Stan losses in the need for insecticide seed treatment.

1:53:47.160 --> 1:53:59.230

890e564a-330e-47b0-8145-b77c5c15c61e

So it's about his, I think 2 year study at Cornell addressing the economics and use of Munich treated seeds for performance for seed corn maggot.

1:54:0.630 --> 1:54:6.240

890e564a-330e-47b0-8145-b77c5c15c61e

So those are people that are set up for June, July, uh.

1:54:6.250 --> 1:54:9.930

890e564a-330e-47b0-8145-b77c5c15c61e

We have one more entomologist, so we have John Tucker again.

1:54:10.20 --> 1:54:23.680

890e564a-330e-47b0-8145-b77c5c15c61e

A lot of his research was in our lit review and he is going to his research is about he's going to talk to us about how ICM principals can or cannot be.

1:54:27.120 --> 1:54:29.800

890e564a-330e-47b0-8145-b77c5c15c61e

Melded with the use of new nucleotides.

1:54:29.810 --> 1:54:30.270

890e564a-330e-47b0-8145-b77c5c15c61e

I can.

1:54:30.280 --> 1:54:31.80

890e564a-330e-47b0-8145-b77c5c15c61e

Can we have both?

1:54:31.90 --> 1:54:44.640

890e564a-330e-47b0-8145-b77c5c15c61e

Can we say we can use ICM with how neonatal seeds works so and he does, he will call out Pennsylvania as a slightly different.

1:54:44.650 --> 1:54:55.540

890e564a-330e-47b0-8145-b77c5c15c61e

It's not as easier comparison to Vermont egg in Pennsylvania as maybe cornelias slightly better direct comparison.

1:54:56.70 --> 1:54:58.240

890e564a-330e-47b0-8145-b77c5c15c61e

Pennsylvania has some differences.

1:54:58.250 --> 1:55:2.220

890e564a-330e-47b0-8145-b77c5c15c61e

He called out that they're mostly no till in Pennsylvania.

1:55:2.230 --> 1:55:8.140

890e564a-330e-47b0-8145-b77c5c15c61e

And so he was saying he believes that's different or Vermont, but he'll talk more about that.

1:55:9.350 --> 1:55:25.480

890e564a-330e-47b0-8145-b77c5c15c61e

So then the other big one that we have is we have Emily Bergeron coming in July from Croplife Canada, and she's going to specifically address Munich seed treatment requirements in Ontario and Quebec with us.

1:55:26.310 --> 1:55:29.320

890e564a-330e-47b0-8145-b77c5c15c61e

And so that is going to get out.

1:55:29.330 --> 1:55:40.550

890e564a-330e-47b0-8145-b77c5c15c61e

We heard that almost a year ago, exactly today about Ontario's requirements, and so this will be kind of an update to that presentation about also include.

1:55:40.560 --> 1:55:48.230

890e564a-330e-47b0-8145-b77c5c15c61e

We haven't heard today about Quebec's requirements for use of neonics treated seeds, so we have that line up for July.

1:55:50.390 --> 1:55:52.200

890e564a-330e-47b0-8145-b77c5c15c61e

And then we have another.

1:55:53.640 --> 1:55:58.580

890e564a-330e-47b0-8145-b77c5c15c61e

Potential presenter, which I'm not sure we need to double up in Luis Robert.

1:55:58.590 --> 1:56:2.850

890e564a-330e-47b0-8145-b77c5c15c61e

Who's a retired, Umm, ministry of accessories and food.

1:56:5.330 --> 1:56:5.820

890e564a-330e-47b0-8145-b77c5c15c61e

Work.

1:56:5.870 --> 1:56:11.690

890e564a-330e-47b0-8145-b77c5c15c61e

Uh soil agronomist from Quebec and so he was going to touch on that too.

1:56:11.700 --> 1:56:16.450

890e564a-330e-47b0-8145-b77c5c15c61e

That was before we got Emily Bergeron, so we might be able to either combine them or have him available for questions.

1:56:17.320 --> 1:56:17.990

890e564a-330e-47b0-8145-b77c5c15c61e

Umm.

1:56:18.60 --> 1:56:19.610

890e564a-330e-47b0-8145-b77c5c15c61e

And so that's their.

1:56:20.80 --> 1:56:23.430

890e564a-330e-47b0-8145-b77c5c15c61e

So the one question.

1:56:24.650 --> 1:56:31.280

890e564a-330e-47b0-8145-b77c5c15c61e

We want to make sure this Emily Bergeron has some has questions.

1:56:31.290 --> 1:56:39.460

890e564a-330e-47b0-8145-b77c5c15c61e

If we have specific questions that we would like her to address about the Ontario and Quebec requirement, so we started a list.

1:56:41.290 --> 1:56:56.720

890e564a-330e-47b0-8145-b77c5c15c61e

And where I put that list here so and we wanted to specifically ask the board for more questions and if you can't think of them right now, that's fine, but maybe I'll send an email and we'll have a like a deadline.

1:56:56.730 --> 1:56:59.480

890e564a-330e-47b0-8145-b77c5c15c61e

Forget me, the questions we have a discussion in.

1:56:59.800 --> 1:57:1.840

890e564a-330e-47b0-8145-b77c5c15c61e

The June meeting, too. Yeah.

1:57:2.310 --> 1:57:3.510

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, maybe by the June meeting.

1:57:3.520 --> 1:57:3.620

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

1:57:4.240 --> 1:57:12.250

890e564a-330e-47b0-8145-b77c5c15c61e

And so some questions that we have on the list right now to be addressed by Croplife Canada representative.

1:57:13.260 --> 1:57:17.420

890e564a-330e-47b0-8145-b77c5c15c61e

It has there been a change in usage of Munich trees?

1:57:17.430 --> 1:57:29.850

890e564a-330e-47b0-8145-b77c5c15c61e

They've since requirements were enacted, our farmers following the requirements in order to get the new unit treated fees or are they just planting untreated or are they not planting anything?

1:57:30.380 --> 1:57:35.690

890e564a-330e-47b0-8145-b77c5c15c61e

What products made by what manufacturers are registered as alternatives to Nexus need treatment?

1:57:35.900 --> 1:57:37.800

890e564a-330e-47b0-8145-b77c5c15c61e

What diamide products are registered?

1:57:38.760 --> 1:57:40.710

890e564a-330e-47b0-8145-b77c5c15c61e

So those are the questions we have right now.

1:57:42.800 --> 1:57:47.600

890e564a-330e-47b0-8145-b77c5c15c61e

Does anyone have one off the top of their head right now that you'd like me to add?

1:57:47.610 --> 1:57:48.510

890e564a-330e-47b0-8145-b77c5c15c61e

You can speak up.

1:57:48.520 --> 1:57:54.500

890e564a-330e-47b0-8145-b77c5c15c61e

If not, we'll have this as an action item for talk about in June.

1:57:54.510 --> 1:57:58.750

890e564a-330e-47b0-8145-b77c5c15c61e

So we can get these questions to that come to Emily Bergeron.

1:58:1.10 --> 1:58:2.380

890e564a-330e-47b0-8145-b77c5c15c61e

And also the the state.

1:58:2.390 --> 1:58:33.560

890e564a-330e-47b0-8145-b77c5c15c61e

I'd also just mentioned that you know if there's but item of the information or area that you think is important for the board to think about or hear about, let us know, we'll try to get a speaker or get some information about it or if if there's somebody you know that you think could make a presentation to the board relative to this topic that you think the board ought to hear from you know, just let us know, we'll see what we can do. Uh.

1:58:38.610 --> 1:58:44.690

890e564a-330e-47b0-8145-b77c5c15c61e

I also think the next two to three meetings are gonna be fairly.

1:58:45.950 --> 1:58:54.230

890e564a-330e-47b0-8145-b77c5c15c61e

The information dense gonna be a lot of information, and then we're gonna have to have a period of time to just sort of digest it all.



1:58:55.310 --> 1:59:0.110

890e564a-330e-47b0-8145-b77c5c15c61e

Maybe have some a couple of meetings with just discussions about everything we've heard.

1:59:0.990 --> 1:59:2.700

890e564a-330e-47b0-8145-b77c5c15c61e

Umm, we will.

1:59:4.10 --> 1:59:11.40

890e564a-330e-47b0-8145-b77c5c15c61e

What everybody know, you know, make sure you have are able to get the arrangements you need to get to the field day.

1:59:11.110 --> 1:59:12.180

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, others field day.

1:59:12.190 --> 1:59:13.440

890e564a-330e-47b0-8145-b77c5c15c61e

I think that's gonna be important.

1:59:14.420 --> 1:59:14.940

890e564a-330e-47b0-8145-b77c5c15c61e

Umm.

1:59:15.650 --> 1:59:24.450

890e564a-330e-47b0-8145-b77c5c15c61e

But anyway, we're we're kind of, you know, heading into the main, the meat of the topic, I think over the next few meetings.

1:59:24.460 --> 1:59:24.690

890e564a-330e-47b0-8145-b77c5c15c61e

So.

1:59:25.680 --> 1:59:27.410

890e564a-330e-47b0-8145-b77c5c15c61e

Umm Yep.

1:59:27.420 --> 1:59:29.850

890e564a-330e-47b0-8145-b77c5c15c61e

And I have one more update so I did.

1:59:30.240 --> 1:59:36.800

890e564a-330e-47b0-8145-b77c5c15c61e

I have a meeting at the end of last week with some representatives from Umm.

1:59:36.880 --> 1:59:48.490

890e564a-330e-47b0-8145-b77c5c15c61e

Health Canada's PM RA, which is basically the equivalent of the EPA and Canada and about basically the federal level.

1:59:48.540 --> 1:59:53.640

890e564a-330e-47b0-8145-b77c5c15c61e

So exactly what genes presentation started with today started with federal and then went to state.

1:59:53.650 --> 1:59:57.410

890e564a-330e-47b0-8145-b77c5c15c61e

So we're getting the provincial.

1:59:58.500 --> 2:0:0.410

890e564a-330e-47b0-8145-b77c5c15c61e

Requirements through crop lights.

2:0:0.760 --> 2:0:1.690

890e564a-330e-47b0-8145-b77c5c15c61e

Canada.

2:0:2.40 --> 2:0:13.700

890e564a-330e-47b0-8145-b77c5c15c61e

So then I asking for a kind of that federal umbrella and what they gave me and it was really informative, is basically their websites where it spells out.

2:0:13.710 --> 2:0:15.800

890e564a-330e-47b0-8145-b77c5c15c61e

Even This is why we did it.

2:0:15.810 --> 2:0:17.180

890e564a-330e-47b0-8145-b77c5c15c61e

We had B incidences.

2:0:17.190 --> 2:0:18.220

890e564a-330e-47b0-8145-b77c5c15c61e

This is what happened.

2:0:18.230 --> 2:0:43.80

890e564a-330e-47b0-8145-b77c5c15c61e

So and it's exactly you, Jill had it on a slide as well of, umm, basically some of Tracy Bowtie's research and the fluency, just the definitely getting agent that led to BMP that are requirements for a language on seed tag labels.

2:0:43.90 --> 2:0:43.440

890e564a-330e-47b0-8145-b77c5c15c61e

Labels.

2:0:44.510 --> 2:1:2.80

890e564a-330e-47b0-8145-b77c5c15c61e

So they said it's all on our website and so I'm I guess our options as a board is I can make a presentation

from the board and they're willing for me, like I can make a presentation summarizing it get fact checked by them just to make sure.

2:1:2.270 --> 2:1:4.240

890e564a-330e-47b0-8145-b77c5c15c61e

And then I can present it to the board.

2:1:4.810 --> 2:1:19.940

890e564a-330e-47b0-8145-b77c5c15c61e

Or I could share all the resources that they gave to me and the board can look and read and we can come back with specific questions that I might be able to then ask them.

2:1:22.230 --> 2:1:27.710

890e564a-330e-47b0-8145-b77c5c15c61e

But they, you know, didn't jump at the opportunity to to come.

2:1:28.0 --> 2:1:29.470

890e564a-330e-47b0-8145-b77c5c15c61e

So those are kind of our options.

2:1:29.480 --> 2:1:30.50

890e564a-330e-47b0-8145-b77c5c15c61e

Either we.

2:1:30.60 --> 2:1:33.480

890e564a-330e-47b0-8145-b77c5c15c61e

Well, we'll try to summarize it so I can tell.

2:1:33.620 --> 2:1:34.0

890e564a-330e-47b0-8145-b77c5c15c61e

That's fine.

2:1:35.120 --> 2:1:40.120

890e564a-330e-47b0-8145-b77c5c15c61e

Umm, so that was kind of my plan was all summarize it and they're happy.

2:1:40.130 --> 2:1:45.720

890e564a-330e-47b0-8145-b77c5c15c61e

They did offer, if if we thought it was necessary, they could be available for questions.

2:1:45.770 --> 2:1:46.30

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

2:1:46.40 --> 2:1:49.870

890e564a-330e-47b0-8145-b77c5c15c61e

Well, let's see if we do have questions after this summary, yeah.

2:1:53.690 --> 2:1:54.660

890e564a-330e-47b0-8145-b77c5c15c61e

But I can't tell.

2:1:54.670 --> 2:2:0.180

890e564a-330e-47b0-8145-b77c5c15c61e

I did have just because it's so relevant to Jill's presentation today.

2:2:0.190 --> 2:2:4.870

890e564a-330e-47b0-8145-b77c5c15c61e

So the BMP's like the requirements that came out of some of that research.

2:2:6.960 --> 2:2:12.590

890e564a-330e-47b0-8145-b77c5c15c61e

Led to these requirements and so this is from so this is PMR.

2:2:12.600 --> 2:2:18.620

890e564a-330e-47b0-8145-b77c5c15c61e

So pest management Regulatory agency umm for Health Canada and so this labeling.

2:2:21.550 --> 2:2:24.110

890e564a-330e-47b0-8145-b77c5c15c61e

Is on the.

2:2:25.590 --> 2:2:26.100

890e564a-330e-47b0-8145-b77c5c15c61e

Label.

2:2:26.110 --> 2:2:35.120

890e564a-330e-47b0-8145-b77c5c15c61e

So like when turning on the plantar don't have it so that the dust is in contact with honeybee colonies.

2:2:35.530 --> 2:2:41.70

890e564a-330e-47b0-8145-b77c5c15c61e

And so all of these things in the IS requirement, they can only use this.

2:2:41.80 --> 2:2:46.310

890e564a-330e-47b0-8145-b77c5c15c61e

They're not allowed to use talk and graphite are not permitted, so this is some of that.

2:2:46.320 --> 2:2:55.330

890e564a-330e-47b0-8145-b77c5c15c61e

But just because it was so relevant to what you were exactly saying, so this is what is available and is what is on the label.

2:2:57.140 --> 2:3:2.950

890e564a-330e-47b0-8145-b77c5c15c61e

They get put on the tags of the bags, so that's the federal.

2:3:3.280 --> 2:3:4.210

890e564a-330e-47b0-8145-b77c5c15c61e

That's federal.

2:3:4.220 --> 2:3:6.310

890e564a-330e-47b0-8145-b77c5c15c61e

OK, let me part of your federal federal yeah.

2:3:6.360 --> 2:3:7.340

890e564a-330e-47b0-8145-b77c5c15c61e

OK, alright.

2:3:10.130 --> 2:3:10.830

890e564a-330e-47b0-8145-b77c5c15c61e

OK.

2:3:14.450 --> 2:3:21.600

890e564a-330e-47b0-8145-b77c5c15c61e

Anybody any of the board members have any comments or questions or topics that bring up what we're talking about the work plan?

2:3:27.980 --> 2:3:32.930

890e564a-330e-47b0-8145-b77c5c15c61e

I'm a throw out a topic which we'll need to think about a little bit.

2:3:32.940 --> 2:3:41.270

890e564a-330e-47b0-8145-b77c5c15c61e

I think it we noticed even thought, but you know we we heard from the Vermont beekeepers about, you know, the stuff they've looked at with the impacts.

2:3:41.780 --> 2:3:42.740

890e564a-330e-47b0-8145-b77c5c15c61e

I've also there.

2:3:42.750 --> 2:3:45.390

890e564a-330e-47b0-8145-b77c5c15c61e

I think there's some research available.

2:3:45.470 --> 2:3:48.230

890e564a-330e-47b0-8145-b77c5c15c61e

I've seen some that we need to sort of organize.

2:3:48.240 --> 2:3:49.810

890e564a-330e-47b0-8145-b77c5c15c61e

It is on the.

2:3:51.500 --> 2:4:0.770

890e564a-330e-47b0-8145-b77c5c15c61e

Mitigating effects of non pesticide treated forage in landscape where you have both, you know you have pesticide treated.

2:4:3.340 --> 2:4:19.50

890e564a-330e-47b0-8145-b77c5c15c61e

Crops at the bees are feeding on or foraging up holidays or foraging on the also have non pesticide treated forage and there's some research which I think will need to delve into and maybe find someone to talk about is how does that work?

2:4:19.570 --> 2:4:31.60

890e564a-330e-47b0-8145-b77c5c15c61e

You know, is that, you know, just sort of having a diverse landscape of of pollen sources versus, you know, one particular type of exposure.

2:4:31.270 --> 2:4:41.910

890e564a-330e-47b0-8145-b77c5c15c61e

So that's how we can do internally, unless somebody on the board has a the source they want to give us that we'll sort of try to build that into umm.

2:4:51.310 --> 2:4:52.560

890e564a-330e-47b0-8145-b77c5c15c61e

OK. We're good morning.

2:4:52.610 --> 2:4:56.880

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, I think I'm going to just to look at while we're looking at this work plan.

2:4:56.940 --> 2:5:1.940

890e564a-330e-47b0-8145-b77c5c15c61e

So I I think I'm going to delete a field trip and push.

2:5:2.10 --> 2:5:8.930

890e564a-330e-47b0-8145-b77c5c15c61e

So then we're going to push the field day, which is 32774 seconds more efficient, Yep.

2:5:15.170 --> 2:5:22.530

890e564a-330e-47b0-8145-b77c5c15c61e

And we you don't need to make Heather do another research update, but that's not me.

2:5:24.740 --> 2:5:31.720

890e564a-330e-47b0-8145-b77c5c15c61e

So probably in June and July, we can flush out, see where we're at and then flush out the meetings in August and September.

2:5:35.490 --> 2:5:36.750

890e564a-330e-47b0-8145-b77c5c15c61e

Mm-hmm. OK.

2:5:39.290 --> 2:5:43.880

890e564a-330e-47b0-8145-b77c5c15c61e

I don't think I had any other things that I had to check brought in this.

2:5:43.920 --> 2:5:54.670

890e564a-330e-47b0-8145-b77c5c15c61e

We do have one action item to OK double check with Umm Council on our end about the wording of that last topic.

2:5:54.780 --> 2:5:55.80

890e564a-330e-47b0-8145-b77c5c15c61e

Right.

2:5:55.220 --> 2:5:59.950

890e564a-330e-47b0-8145-b77c5c15c61e

Umm, so I know that's on my action item.

2:6:0.0 --> 2:6:0.670

890e564a-330e-47b0-8145-b77c5c15c61e

I just.

2:6:1.300 --> 2:6:15.90

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, we were waiting for OK session, but so that's for the I'm referring to the last topic for the criteria for a system of approval, the unit treated article seeds of kind of just the interpretation of that and.

2:6:19.680 --> 2:6:21.100

890e564a-330e-47b0-8145-b77c5c15c61e

This responsibility for the board?

2:6:21.110 --> 2:6:21.560

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

2:6:21.600 --> 2:6:22.240

890e564a-330e-47b0-8145-b77c5c15c61e

Discharge.

2:6:22.250 --> 2:6:22.980

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah. OK.

2:6:25.470 --> 2:6:33.50

890e564a-330e-47b0-8145-b77c5c15c61e

OK, the next topic on the agenda of the relevant 2023 legislative bills we can take off the agenda now.

2:6:33.320 --> 2:6:42.210

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, I left it one last time in case anything snuck in in the last two weeks of the session after our last meeting.

2:6:42.320 --> 2:6:43.760

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah, but as far as I know, there's nothing.

2:6:45.130 --> 2:6:46.980

890e564a-330e-47b0-8145-b77c5c15c61e

And now we're open for public comments.

2:6:49.840 --> 2:6:53.340

890e564a-330e-47b0-8145-b77c5c15c61e

That would be glad to hear from any of the folks.

2:6:54.370 --> 2:6:55.140

890e564a-330e-47b0-8145-b77c5c15c61e

They weren't on the board.

2:6:55.150 --> 2:6:56.280

890e564a-330e-47b0-8145-b77c5c15c61e

Who participate in the meeting?

2:6:56.290 --> 2:6:58.260

890e564a-330e-47b0-8145-b77c5c15c61e

If they anything they want to add to the record.

2:7:8.470 --> 2:7:10.440

890e564a-330e-47b0-8145-b77c5c15c61e

I see when you see it as a chat.

2:7:10.450 --> 2:7:10.770

890e564a-330e-47b0-8145-b77c5c15c61e

How about?

2:7:11.710 --> 2:7:14.660

890e564a-330e-47b0-8145-b77c5c15c61e

Has there been an impact of farmers under the new rules?

2:7:15.610 --> 2:7:17.380

890e564a-330e-47b0-8145-b77c5c15c61e

That'd ohter Ontario. Yeah.

2:7:17.390 --> 2:7:17.520

890e564a-330e-47b0-8145-b77c5c15c61e

Yeah.

2:7:17.530 --> 2:7:18.480

890e564a-330e-47b0-8145-b77c5c15c61e

Got it, Wendy, thanks.



2:7:18.490 --> 2:7:19.0

890e564a-330e-47b0-8145-b77c5c15c61e

Great. Thanks.

2:7:30.170 --> 2:7:42.480

890e564a-330e-47b0-8145-b77c5c15c61e

OK, well, that being not hearing any public comments, we can go ahead and adjourn and we'll reconvene on the 26th of June.

2:7:43.680 --> 2:7:45.680

890e564a-330e-47b0-8145-b77c5c15c61e

And yeah, as always, stay in touch with Morgan.

2:7:45.690 --> 2:7:51.930

890e564a-330e-47b0-8145-b77c5c15c61e

Have any questions or need any information and we'll look forward to seeing everybody in the month.

2:7:52.540 --> 2:7:53.40

890e564a-330e-47b0-8145-b77c5c15c61e

So thank you.

2:7:56.20 --> 2:7:56.440

890e564a-330e-47b0-8145-b77c5c15c61e

Thank you.

2:7:57.350 --> 2:7:57.570

Owen, Sarah

Bye.