

Transcript For Gleanlea Research Video

00:00:00:13 (§§§)
00:00:13:20 There is a lot of information from Glenlea,
00:00:16:07 which is highly relevant to farmers,
00:00:17:23 and an example would be designing a good crop rotation,
00:00:21:06 designing a rotation that supplies enough
00:00:23:00 nutrients to the crops.
00:00:24:13 This is really important to farmers.
00:00:26:09 When I think about the Glenlea rotation,
00:00:27:23 there's really, there's really two, two dimensions
00:00:31:08 to the study.
00:00:33:00 One is very practical and agronomic,
00:00:35:18 where information is produced that farmers can
00:00:38:13 use today, or in their planning for tomorrow.
00:00:42:02 And then there's the other bubble, which is really
00:00:44:08 monitoring the ecology of the system,
00:00:47:10 and we're starting to use some of those things that we learned
00:00:50:04 in the organic system for conventional production,
00:00:52:19 because some of our weed killers don't work anymore.
00:00:54:23 (§§§)
00:00:58:10 I'm with Poplar Grove Farm, and we're an organic farm.
00:01:01:09 One of the things that Martin Entz and his team
00:01:03:22 does here is they provide a voice.
00:01:07:12 Until his group came onto the scene, there was very
00:01:10:08 little to grab onto as far as local knowledge.
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00:01:16:01 The more knowledge you have, the lower your risk is.
00:01:19:11 With the greater and greater supports that are out there now,
00:01:22:03 the risk to going into organic farming is less.
00:01:25:00 It's encouraging for an organic farmer to realize
00:01:28:04 that there's someone in the research community
00:01:30:17 that takes organic farming seriously.
00:01:33:18 (§§§)
00:01:38:00 When I look at the rotations we're doing,
00:01:40:00 it's really important to have a really good green
00:01:43:01 manure crop in that rotation, and I think
00:01:45:17 that's, that always comes back to, to sort of how we
00:01:49:02 grow high yielding crops as we need to start with
00:01:52:00 sort of a fertility regime, and that starts
00:01:54:11 with growing a good green manure crop.
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00:01:58:19 One of our big focuses in the laboratory
00:02:01:09 is grappling with the great challenge of climate
00:02:04:11 change and the production of greenhouse gasses
00:02:06:22 from crop production.
00:02:08:09 Well nitrous oxide is produced from the cycling
00:02:11:01 of nitrogen in soils.
00:02:13:05 In organic systems, such as here at Glenlea,
00:02:15:21 we're fixing nitrogen via legumes, such as alfalfa,
00:02:20:09 allowing that legume to grow and then we plough it in,
00:02:24:15 in the late summer, early fall, and then that
00:02:28:01 provides the nitrogen for the following year.
00:02:30:23 When we plant wheat following the alfalfa,
00:02:33:19 we're not seeing emissions of nitrous oxide during
00:02:37:11 the growing season.

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00:02:40:22 I am the Coordinator for the Participatory Plant
00:02:43:16 Breeding Program here at the University of Manitoba.
00:02:46:16 And the goal of the program is to empower
00:02:49:05 farmers to breed their own varieties of wheat, oat,
00:02:52:14 or potato, on their own organic farm, so that they end up
00:02:55:04 with a variety that works specifically for their system.
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00:02:59:04 I believe a farmer, an organic farmer specifically,
00:03:02:14 will find more profitability in a line
00:03:06:15 that's been developed under organically managed systems,
00:03:09:20 and has especially disease resistance and maybe
00:03:13:07 some competitiveness with the weeds, so they don't have
00:03:16:12 to worry about how to manage that cultivar.
00:03:19:21 They can grow it on their land, and if a disease is present,
00:03:23:03 they'll have genetic resistance, which is really optimal.
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00:03:27:07 I always like to tell people that, that organic systems
00:03:29:21 can produce high quality food and, and lots of it.
00:03:34:13 They can produce that food with fewer greenhouse gas emissions,
00:03:38:12 but that's only if attention is paid to the whole system.
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