

From surrender to crop saver, rescue dog sniffs out invasive disease in canola fields

A New Brunswick goldendoodle got a second chance and the smart sniffer is now nailing it in Alberta
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Two dogs from New Brunswick are now trained to find a destructive root disease in Alberta canola fields — one was a hyperactive surrender dog that may have had a hard time finding a new home.

An Alberta Agriculture and Forestry scientist says recent clubroot detection training has shown impressive results with the two dogs involved excelling.

"The German shepherd fit the criteria of being a young, highly active dog," Michael Harding said.

"The goldendoodle was a rescue animal ... it's now one of the only two dogs in the world that can do this."

This, being trained to find clubroot in Alberta canola fields.

"It can be very damaging," Harding said.

"When the soil gets infested with the disease to a certain level, you have to stop growing canola for an extended period of time."

Harding partnered with a dog trainer from the Maritimes, the two training dogs and a research group called Farming Smarter, after Harding followed a study of dogs detecting disease on avocados in Florida.



Clubroot disease can be destructive to canola crops. (Farming Smarter)



This goldendoodle was surrendered in New Brunswick. Now the dog has been trained to detect the destructive clubroot disease in Alberta canola fields. (Farming Smarter)

"Dogs live in a world of scent. They detect things in levels like parts per trillion. Our most sensitive scientific instruments can't do that," Harding said.

He says that is similar to one drop of liquid in a volume of water that could fill 20 Olympic-sized swimming pools.

"Their ability to detect things is just astonishing. They are mobile, they can get into small spaces," he said.

In clinical trials, the dogs achieve perfection in detection. But Alberta fields have different smells and rodents to deal with, so when the New

Brunswick dogs hit their first field, there were hiccups.

"There were a lot of distractions and additional scents. It didn't go seamlessly, it took some additional adaptations in those new conditions, but they nailed it."

The next step is training the dogs to detect the clubroot spores. Those spores can spread the disease rapidly and remain on a field for up to 15 years, he said.



This German shepherd was chosen for the project because of age and activity levels. (Farming Smarter)