

Helping to control weeds and erosion

By mp|media solutions, for the Victorian No-Till Farming Association

Through the Northern Victoria Grain & Graze 2 program, a project looking at combining no-till farming with a livestock enterprise is occurring across northern Victoria. The project aims to identify strategies being used by growers to maintain the integrity of their no-till cropping system while also running a grazing enterprise on their farms.

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Location: Sea Lake

Farming operation: cropping and sheep

Livestock: Wiltipoll stud comprising 65 breeding ewes and two rams, plus a small herd of Lowline cattle

Crops: wheat and barley

Mean annual rainfall: 300mm

Soil type: sandy loams and calcerous

Third-generation Mallee farmer Nic Harrison knows you have to look after the land if you want to reap its rewards.

"Dad's motto is not to get too greedy," he says.

Nic runs Tyrrell Park, about 10 kilometres east of Sea Lake, with parents Ron and Meryl and he reckons his father's saying is spot on. It's a motto to live by and, when it comes to getting the most from your soil, to apply to your farm and the marketing of its products.

The Harrisons crop nearly all their 2000-hectare property to wheat and barley and have used the no-till farming method for the past eight years.

Their soil, predominantly sandy loam and some heavier creek flats, is growing healthier every season. And that makes the Harrisons happy.

"It's definitely got better," Nic said.

"Our yields have improved with no-till for sure.



"Firstly, the paddocks are a lot softer and spongier to walk on because of the higher organic matter and better soil structure.

"There are more worms and even a lot more natural growth such as toadstools."

Nic remembers dust storms that used to blow pulverised soil for miles, covering fence lines and exposing hard ground underneath. That doesn't happen now.

"We've got organic matter there – the stubble – all year round, and it's actually building up," Nic said.

The Harrisons also run a sheep stud on their property and a handful of cattle. They keep the livestock separate from their cropping ground.

The cropping system

The Mallee country around Sea Lake was embracing the no-till method when Nic returned from his applied science degree at Dookie College in 2003.

He reckons about 90 per cent of farmers in his district have adopted the no-till approach to varying degrees.

The Victorian No-Till Farmers Association describes minimum till as 'one pass seeding' with points, creating less than 20 per cent soil disturbance. Zero or no till is a 'one pass' sowing system using discs for minimal soil disturbance.

"Our first step was converting our existing seeder for no-till, which involved changing the tyne pattern from nine inch to 12 inch and having narrower point," Nic said.

"We also put on press wheels to improve seed soil contact.

"We're not going to controlled traffic but we do have John Deere navigation on our sprayer and seeder.

"We're precise in sowing to about two to three centimetres and we've recently got auto shut-off on our sprayer."

The Harrisons usually have a couple of chemical fallow paddocks a year, depending on the season, to reduce weed and seed banks.

While no-till has cut tractor time once



spent cultivating, it has added extra hours pulling the boom spray to tackle mainly grass weeds in cereal crops.

Sometimes rust can raise its head if weather is humid in August and September and the boom spray is back at work.

"I guess a down side to no-till is there's a lot of chemical use and chemical resistance in the long term," Nic said.

The biggest test for no-till farming came when drought struck. That's when improvements in soil health and moisture content came to the fore.

Any rain that fell soaked in, instead of panning on the surface. Nothing was wasted.

"When we first started no till we had a few dry years and we realised we were still getting a harvest," Nic says.

Livestock

A series of small paddocks close to their house is home to a growing Wiltipoll stud.

The prime-lamb breed sheds its own wool and is highly resistant to fly strike, lice and grass seeds.

Meryl oversees about 65 breeding ewes and two rams since starting the enterprise more than a year ago. She has five rams, her stud's first progeny, for sale at the moment.

The small paddocks – the biggest about 13 hectares – are unsuitable for cropping but perfect for sheep.

The stock, which help control weeds, are rotated to make the most of pasture growth and natural salt bush cover.

This approach also helps paddocks, sown to vetch or snail clover, get away and prevents erosion issues in dry months.



There are grain lick self-feeders and weather-proofed hay feeders in every paddock.

"We try to keep the numbers down so the stock are in really good condition, won't get too hungry and pulverise the soil too much," Nic said.

"We also try to rotate them round the paddocks so there's always organic matter left so we don't get erosion problems over summer."

The stock paddocks are also home to Ron's small herd of Lowline cattle - for the family's steak supply.

Tyrrell Park used to carry 1800 merino wethers and a self-replacing merino flock when Nic was a child. They grazed on the stubbles until the farmers decided, at the start of their no-till journey, the stock were reducing organic matter, causing staggered germination by pressing seeds into the ground and creating feed and spray issues.

Lambing also encroached on cropping work.

So they've down-scaled their livestock and it's working for them.

A bright future

Nic loves farming and its challenges. He's passionate about the land, the science and technology side of the enterprise and the marketing strategies needed to sell their grain.

"No two years are ever the same and there's always something different happening," he said.

Find out more

For further information about the Northern Victoria Grain & Graze 2 program, including opportunities to get involved, contact:

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