

Exciting time to be in agriculture

By Melissa Pouliot

At a glance...

- Tara Hindson is a VicNoTill board member and farms with her family in the West Wimmera of Victoria.
- The main enterprises are 15,000 breeding ewes, cropping and centre pivot irrigation of pastures.
- Biological management includes composting, biological/nutrient foliar sprays and multi-species covers.

THE words grateful, excited, amazing and lucky sit comfortably amongst family farm, regenerative ag, compost, healthy soils, nutrients and fresh air in conversation with young farmer Tara Hindson from Victoria's West Wimmera.

As the fifth generation on the Hawkins family farm at Brippick, Wombelano and Patyah, Tara is keen to emphasise how grateful and lucky she is to be working alongside her father Peter Hawkins on the land Peter's grandfather first settled in the 1800s.

She's doing what she loves and can see a world of opportunity ahead.

"The things I love about farming are working outside and enjoying the fresh air while we produce products to help feed the world. It's such a great place to bring up family. I loved it as a child so want to be able to bring my children up in that same environment," Tara says.

Tara's refreshing honesty about where her family is at and where they would like to be with their farming system epitomises VicNoTill's philosophy of 'farmers helping farmers'.

They are only at the start of their regenerative journey and she's upfront that wanting to change, and being able to change, don't always align perfectly.

"Going from conventional farming to a more regenerative/biological system isn't always easy for a number of reasons. Change takes time and there is no overnight fix to rebuilding your soils to where you want them to be.

"Also, when everyone in the farm business is doing their research and trying to communicate what they've discovered to everyone involved, it's not easy to have that trust and confidence in introducing new processes. To change from putting fungicides out and having that insurance for your crops, to not putting them out and taking a risk can be difficult even if you are the one suggesting that change.

"We're definitely a long way from where we want to be, but we have made a start and know where we'd like to get to."

The system is focussed on three broad areas:

- A livestock-dominated system with a focus on perennial and annual pastures;
- Cropping the best country; and,
- The use of biological management techniques such as compost, nutrition and biological foliar sprays.

Family business

In 2009 Tara and her husband Rob returned home to manage the cropping and sheep side of the enterprise with Peter and his partner Susan. Her grandparents Mac and Joyce are also involved in the farm business, although they are not as hands-on now.

Tara's brother James owns and runs a piggery as a separate enterprise on land adjoining Brippick.

They have 15,000 breeding ewes to produce



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Overview: VicNoTill is a leading voice in Australia for the use of no-till farming and regenerative agriculture systems. The farmer-led association started in 2002 after a small group of Victorian Wimmera farmers joined forces to discuss the benefits they were seeing using no-till farming techniques.

The group's success quickly spread and VicNoTill went from strength to strength as more farmers saw the benefits of no-till and zero-tillage farming. VicNoTill farmers are implementing soil health principles to build the robustness and resilience of their farming systems. They are continually exploring new ideas and innovations such as regenerative ag, holistic farming systems, soil biology, nutrition, and other techniques that improve soil health and the long-term future of farming.

VicNoTill prides itself on being a valuable education and mentoring resource for farmers across Australia and around the world. They are always looking for new members to join so if you'd like further information, please get in touch.

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Tara and Rob Hindson with daughters Isabelle and Winnie.

wool and fat lambs. There is pivot-irrigated lucerne for sheep feed as well as seed production. They also grow wheat, beans and canola.

Their three blocks are spread over a distance of 75 km. The centre pivot irrigators are at their home block, Brippick, where they crop and also run sheep. Wombelano and Patyah are grazing blocks with perennial and annual pastures. They have more trees than Brippick and are more suited to lambing with sheltered areas and some wetlands (swamps).

Soils vary from sand to loams to black self-mulching clays, and with this variation comes some management challenges.

“One of the main challenges on our black clay soils is water logging during winter and early spring. These clay soils contain high levels of both sodium and magnesium, which leads to soil dispersion, aggregate breakdown and reduced aeration.”

They are in a reliable rainfall zone and although they’ve had some dry years during the past decade, they have been fortunate to avoid the extreme drought conditions that many other parts of Australia are experiencing.

“Obviously we have our ups and downs but we feel really lucky here. The wetter years are more challenging for us with cropping because our paddocks get washed out – we have more limitations from water-logging than from the dry due to our sodic clay subsoils.”

Travel first

Tara took a long way around a short cut to get back to where she started, travelling near and far after finishing school in Adelaide. A gap year travelling overseas, one year studying a Bachelor of Environmental Science followed by three years completing a Bachelor of Business in Farm Management at Marcus Oldham and on-farm experience in Western Australia and the Northern Territory preceded her return home.

The year 2015 provided several turning points to

take them in a clearer direction towards changing the way they farmed, starting with completing two Certificates in Nutrition Farming with Graeme Sait, once on her own and a second time with her Dad.

Tara says it helped them understand how everything is linked to the health of their soil.

“Graeme Sait’s course integrated soil health, plant health and human health and made us realise how it’s all linked and how important it is. Having Dad do the course with me meant that we were both on the same page.”



Introducing a multi-species crop has provided more balanced feed for sheep during winter.



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It takes 12 weeks for the piggery manure/straw to become paddock-ready compost.

Challenge and opportunity

When Tara's brother James built his piggery in 2012, manure and straw presented both a challenge and opportunity. In 2015 Tara won a Peter Olsen Fellowship to pursue an interest in producing compost from this by-product.

"We had no idea how to make compost or anything about it. Once I started researching it opened my eyes to soil health and the big wide world of soil biology which then led me into regenerative ag. We were starting completely from scratch, but we knew there had to be a way to make it work."

The fellowship paid for a US Study Tour and Australian-based research into compost and soil health.

"When I visited Illinois, I saw they were getting the same yields or better from using biological fertilisers. Plus they were getting a premium for their products, so there was proof that there can be a strong business case for using animal waste in this way. We were also keen to see the agronomical benefits of using the compost. We knew the benefits were there, but the challenge was how make it work in a modern farming environment."

But it also exposed Tara to the bigger picture of what has now become part of today's agricultural dialogue – biological farming and regenerative ag.

"Although I was there to learn about the compost, I also saw how farmers were using cover crops as part of their systems and it made me realise there was a whole lot more to this than just making and spreading compost."

Farmer health and wellbeing

Tara says attending workshops, farm tours and being involved with farmer groups were important to get to as a reminder of your desire to make changes, try new things, think outside the conventional mindset and strive to leave the farm in

a better condition for future generations. They also host visitors to their farm including Marcus Oldham students, Women on Farms groups and Melbourne University. They enjoy the interaction with other interested farmers.

Tara says the loop they're trying to close is to improve their soils is to grow healthier pastures to provide their sheep with all the nutrients they need to fight worms, combat feet problems and be healthy. All this while farming in a way that promotes their family's overall health and wellbeing.

"When we first met Graeme Sait and he went through the integration of soil health, plant health and human health, it made us realise that the way we were farming with synthetic fertilisers and the chemicals we were spraying was having a negative impact on the future health of our farm on so many levels."

As part of their vision for the farm, they're also changing the way they manage their sheep. They ceased mulesing in 2016 and have been changing their genetics to the modern Merino, focussing on ASBVs (Australian Sheep Breeding Values) for fat, muscle and growth.

"Where we're going with our merinos, we've been able to improve our lambing percentages and they are growing quicker. And although we didn't originally set out to go to non-mulesing to seek a premium for that wool, we're now getting a premium."

"We're pretty fortunate – prices of lambs are amazing, wool's been amazing and we're getting a premium for our non-mulesed wool. Hopefully down the track we will see a further benefit from growing higher quality crops through our regenerative system flow through to the sheep."

Tissue and SAP tests

Regular tissue testing and plant SAP tests help determine which foliar sprays and trace elements their plants need.

One practice they have adopted is using liquid-inject seeding fertiliser rather than a granular, with the aim of providing an efficient delivery of nutrients to the seed. This is accompanied by a biological inoculant, brewed on farm, aimed at improving disease resistance and nitrogen fixation at the root zone.

They produce around 2500 tonnes of compost a year. Originally they were applying one tonne to the hectare over a greater paddock area. They are now applying three to four tonnes to the hectare and are covering less hectares.

"This way we are getting a quicker gain and get a better response."

The paddocks that got the compost attention first were their dryland and irrigated cropping paddocks. Now they are turning their attention to the pastures they grow for their breeding flock.

Tara knows they have come a long way since they first started and regrets not taking more data and monitoring the soils and plants more closely back then so she could make clearer comparisons.

"We have seen a definite increase in phosphorous in those paddocks that have had a few years of compost and the worms have really increased too. The plants are definitely healthier and there's less red-legged mite pressure at the start of the season, which means we have been able to reduce insecticides on those paddocks."

They are adding lime or gypsum to the compost if paddocks need it but are still trying to work out if it's best to put it in at the start of the composting process or just before they apply the compost.

"With the compost we are going to achieve a long-term benefit. When you put urea on it's green straight away and looks good, but the compost is more long-term. Because it is a slow release fertiliser, it's only now we're starting to see the results."

Nutrients and biology

They have a compost pad with windrows that they water and turn. It takes about 12 weeks from when the straw and manure comes out of the piggery to when it is ready to go onto the paddocks. Tara says when the composting process is finished the end product resembles dark, rich soil.

"It's just beautiful what it turns into, and it's filled with so many nutrients and biology."

They use a compost spreader that holds around 30 cubic metres, and it doubles as a silage feeder over summer.

Not a family to rest on its laurels, they are now looking into different ways to improve their soil structure and utilise their compost. James has completed a Nuffield Scholarship into sub-soil manuring and overcoming the limitation of machinery for this process.

Subsoil manuring is placement of the compost into the subsoil. They have done on-farm trials including a comparison of 20 tonnes per hectare

versus 10 tonnes with early results leaning towards the 10 tonne rate for their environment.

“We have moved away from tillage as a practice, but we see this subsoil manuring as a one-off intervention. After the compost is applied to the subsoil, a perennial pasture is planted whereby the roots help change the soil structure over time.”

Strip n disc system

Three years ago Tara and James went to their first VicNoTill conference, and the stripper front caught their eye. A growing number of farmers in the VicNoTill network are using stripper fronts to provide extra protection for their soils and plants from wind and temperature, and as a tool to complement disc seeders in what has become known as a ‘strip n disc system’.

They saw a different purpose for their system – to increase the bulk of their straw which they cut for the piggery, which eventually comes back onto the paddocks as compost. They sow straight in with a tyne but would like to eventually transition to a disc seeder. They are also starting to grow more multi-species covers and work towards growing roots all year round.

“Traditionally our groundcover hasn’t been great because we have grazed our pastures too hard. We have set up containment pens so we can take the sheep off the pastures and leave a good amount of groundcover to help protect the soils over the hot summers and reduce erosion.”

Tara says getting crops to grow over summer in their environment can be challenging.

“We’ve had trouble achieving a living root in the ground all year round with annual cover crops. In our climate perennial pasture such as phalaris and lucerne are a good option to achieve living roots over the summer. Cover crops are also an option if we get our timing right and are ready to put a crop in if we get some summer rain.”

In 2020 they introduced a multi-species cover into their cropping rotation, creating a significant increase in the amount of balanced feed available for stock during winter when pasture is limited.

“We are extremely excited about the benefits that have been created through the addition of this crop into our rotation. As well as helping with our rye grass problems, it has also enhanced microbial activity underground. One of the keys for achieving a large amount of bulk in the crop was sowing it early.”

Farming future

Tara is enjoying contributing to the VicNoTill board and is also benefitting from being amongst like-minded farmers.

“As you start looking into regenerative systems you discover more and more opportunities and different ways of doing things.

“It is exciting to meet and interact with the VicNoTill farmers who are farming regeneratively at

various stages and to see how they’re improving and the gains they’re making. The opportunities that are out there are just incredible.

“For me, VicNoTill represents our farming future and is vital to influencing the direction of farming into the 21st century.”

One aspect that appeals to Tara is that VicNoTill aligns with her own vision and focus on soil health.

“Our soils are the building blocks of our farming system. Having healthy soils means monitoring and improving water and nutrient holding capacity, along with increased carbon which leads to more productive resilient soils that can handle dry and wet conditions better.

“They are the key to growing quality products, leading to healthy livestock and healthy people. If we improve the health of our soils our farm will be a more profitable, sustainable healthy business.”

The more research she does and the more she learns, the more excited she is about the opportunities for changing the way agriculture feeds the world.

“We are working towards producing a quality product, but not just a quality product – a healthy, nutrient-dense quality product. Reducing our physical exposure to chemicals is a healthier way to farm, and this is something we are really excited about.”

This article first appeared in *From the Ground Up*, Spring 2019, VicNoTill’s member magazine. To become a member and access the latest in regenerative farming systems in Australia join the VicNoTill farmer network. ■



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