

A case for conservation farming

Funded by the Australian Government's Caring for Our Country



Photo courtesy of Groundcover



CARING
FOR
OUR
COUNTRY

Merriwagga, Northern Riverina NSW
Farming 5,000 ha
Conservation farming since the early 1980s
No-till since the 1990s

Peter Dart: A "big call" in the 80s
continues to pay off
30 years later

A need to reduce the damage by wind erosion on their property in the 1980s saw Peter Dart and his brother, Ross, make the decision to retain stubble as part of their farming operations, which was to be the start of their conservation farming practices. It was that moment Peter describes as "the big call".

Today, Peter and his wife, Phyllis, farm 5,000 hectares (ha) across two properties at Merriwagga and Binya totalling about 7,000 ha, as well as some leased country, where the red and grey loam soils have benefited from more than 25 years of conservation farming or no-tillage practice, in a district averaging about 350mm rainfall per annum – all of which has already fallen this year.

The Dart's also run 1,000 Polwarth sheep in a self-replacing, dual-purpose enterprise.

Peter says, "We're farming about 80 percent of the country all of the time and 20 percent is in fallow and the sheep run in particular areas on our blocks east of here. I have no sheep at Merriwagga now at all. If you're going to be a no-till farmer you probably shouldn't have sheep.

"If we could find some way of replacing the income from sheep, we would."

Peter Dart's enthusiasm for farming is evident and the years spent on this passion are marked by the number of wheat crops – "47 wheat crops".

He started farming in 1965, and like many spent the 1970s clearing his property. By the early 1980s, wind erosion was an issue and he and brother, Ross, made the decision to retain their stubble, even though they were still cultivating, this was to be the start of a change.

"My brother went to Canada and came back with all these ideas and that's what got us started. At that time we bought a Mason drill, which was a knife-point press wheel setup.

"We started with that, then in the 90s when chemicals got cheaper we got started on the no-till and in the 90s I bought a Great Plains drill, a disc drill. I had that for about 10 years and now I have a John Deere disc drill. It's been a progression from one step to the next," said Peter.

"The first paddock we decided not to cultivate is going into 25 crops straight this year. We've been able to maintain production, so there's no argument there. We do get failures, so paddocks will have a spell by default! No rain – no crop. But we've been able to maintain the district average or a bit better in that paddock."

Peter says soil tests have shown the improvements, with phosphorous levels going from "a few" to 40 or 50mg/kg and organic matter has gone from 0.3 to 2.7 percent and has now levelled off at 2.5. The pH is 5.5 to 7.5.



CANFA

CONSERVATION AGRICULTURE & NO-TILL FARMING ASSOCIATION: PO BOX 276 WELLINGTON NSW 2820

T: 02 6845 1044 M: 0427 452 488 E: canfa@bigpond.com W: www.canfa.com.au

Peter Dart

Page 2

“Based on my observations, I believe it’s come into balance – that’s what the soil can hold and that’s as much organic matter we’re going to get into this country without putting a lot of other stuff in, which gets costly.

“Once we get phosphorus levels to 30 plus we just maintain them. I’m sowing wheat in a canola paddock now and we’re putting 70kg/ha MAP on that; there was a reasonable canola crop here last year so we’re just replacing what we took out last year. We don’t use much nitrogen.

When farmers make changes that break from convention, it often doesn’t take long for neighbours to start peering across the boundary fence. However, Peter describes his district as progressive and says there has been great interest, estimating that half the crop sown in the district this year will be with disc machines.

“It all gets back to wind erosion. When we first cleared this country the powdery soil just blew away. I saw fences covered up in one day, I figured there had to be something better than that,” he says.

“In the days when we made the decision to conserve our stubble we didn’t have the machinery we have today. If I could have had the rig I’m driving today, then, we would have been no-tilling in the 80s.”

Peter says he and his brother were unable to get press wheels in Australia 30 years ago.

“We took a picture Ross had taken in Canada where he saw them to a welding bloke in Griffith and he made them for us. It was a progression from there.”

“The other thing is that the price of our chemicals is going down and everything else keeps going up so it’s a very practical decision now to go no-till than conventional.

The decades spent working on the evolution of the Dart’s farming systems has taught Peter the importance of timing, particularly in a no-till system.

“In no-till farming it’s critical – you have to do it on time. A few days late spraying weeds can cause you an awful lot of heartache down the track. By changing the environment, we have changed the weed spectrum.

“When we started ryegrass and saw grass were a problem; we’ve overcome that and now it’s fleabane and windmill grass. You take an aggressive weed out of the system like ryegrass or barley grass, the less vigorous plant then takes over.

“We don’t do planting trials here anymore but we’re always trialling new chemicals and there’s a Central West Farming Systems demonstration site at Merriwagga that provides a lot of good information,” says Peter.

When asked what he needed to make his job of farming better, Peter responded very quickly that the machinery companies could be doing more.

“We’ve got the ideas but they never talk to us. There’s a fault on this disc machine and I can solve that problem, but we’re not taken seriously. We’ve done it ourselves.

“That’s what happens – you give a machine to a farmer and he modifies it to make it work.”

As for future challenges, Peter believes the biggest one is finding a replacement for Roundup® and dealing with glyphosate resistance in weed populations.

Peter Dart

Page 3

“I can’t see a replacement for Roundup® happening in the near future and resistance will happen regardless of how careful we are. We rotate with paraquat and diquats every two or three years and the paddock I’m on now was treated with Spray.Seed® this year.

“We do still cultivate paddocks. I did about 240 ha on this farm last year in paddocks that had been in crops for 12 or 13 years just to deal with big umbrella grass plants that I couldn’t do anything about.

“To plough a paddock and get it back into order, as long as you do it properly, you might get the next 20 years out of that paddock.

“It’s not a religion – you’re allowed to make choices. You don’t have to confine yourself to one program. I’m very much against burning stubble but I’ve had to that once or twice,” says Peter.

Peter says one of the hardest things to get used to with no-till is what he describes as “sitting on your hands and doing nothing”.

“Farmers are programmed to work - we’ve got to find something to do. If you’ve only got a weed here and there you’ve got to sit on your hands because it’s not worth the effort. Talk to the wife, that’s the other choice you’ve got!”

T: 0427 654 458 or pdart@dbgroup.com.au