Ninghan Group tour central wheatbelt in search of disc seeders

Members of the Ninghan Farm Focus Group decided they need to know more about disc seeders and how they could help their crop establishment in low rainfall farming system. Luke Sprigg, Ninghan Group Chairperson, initiated a study tour of the eastern wheatbelt in October this year and discovered a lot more.

The tour was coordinated by WANTFA Extension Officer, Mike Ashworth to help the Ninghan Group find out more about disc seeders. In a very full two day tour they visited four successful no-till farmers throughout the central and eastern wheatbelt. The tour groups consisted of 5 committee members of the Ninghan Group who travel to Kondinin, Hyden, Narembeen and Tammin before returning to Mukinbudin.

The highlight of the tour was a visit to Colin and Libby Hutchinson at Tammin where this year they have obtained outstanding success with their no-till system.

Luke Sprigg attributed this to the use of tramline farming and a discipline approached to “stack” rotations.

The use of tramlining to improve soil structure, coupled with stubble retention and the complete control of summer weeds, Collin has been able to maximise the utilisation of their most limiting factor, water.

Colin received approximately 200mm of rain between January and February with only 14mm falling in both March and April.

“We started seeding 12 April, going deep into subsoil moisture, then we didn't get any more for 52 days. We got a further 10mm in May, and with that I knew we would finish the program,” he said.

Colin indicated that all the benefits experienced come from their ability to store moisture.

“We got our entire crop in while others around were really panicking,” he said.

For Colin, setting up the tramlining system was a real learning curve.

“We made a lot of mistakes, one big tip is to disregard fence lines. Just keep going, anything is movable”.

Colin is currently set up on 2m tramlines, although he would prefer to be on 3m trams to incorporate the harvester in the system.

Colin would never cultivate the tramlines explaining that “The trams are so trafficable, in winter I can spray anytime and in summer I get no dust”.

Colin’s has applied higher rates of residual herbicide to the tramlines making them a very hostile place to weeds to grow.

“I don’t get a yield penalty for having tramlines, the soil health through the rest of the paddock compensates for the proportion of unused land.”

“Now we have the paddocks soft, our paddocks have evened up a lot. The water soaks in where it falls and doesn’t run. Our hill tops aren’t dry and our valleys waterlogged, it’s got to be doing something for salinity,” Colin concluded.

The Ninghan Group members also visited Collin Steady, Narembeen who has just changed over to a NDF disc seeded bar earlier this year. Collins found his tyne machine dried out the soil too much but he still had some work to do on the NDF bar to reduce the soil throw.
Jim and Robyn West farm at Kondinin incorporates cover crops to increase their rotational diversity. “Cover crops were needed in my system as they add the rotational diversity needed for better weed control. They also increase soil moisture by increasing cover and decrease nitrogen fertiliser costs as I grow legume nitrogen in the rotation,” he explained to the group. When the group visited Geoffrey and Vivienne Marshall farm south east of Hyden the message was clear; rotation is the key to the success of their no-till system. “I just love the wheat, wheat, barley rotation, it’s just so straightforward. But I’m challenged by the other crops, because they drive the rotation in relation to weed control and soil fertility,” explained Geoffrey. They use a combination of Conserva-Pac tyne machine and a Austill disc seeder. Geoffrey believes that the central considerations when designing his rotation are continuous soil cover and the seeding method. When it comes to weed control in high residue systems Geoffrey feels that he needs to do things a bit differently, “that’s why I’m leaning more towards discs,” he said. Geoffrey’s aim is to gradually and sustainably increase organic carbon levels in his soil. “Increasing organic carbon holds and releases nutrients for the crop and allows the soil to hold moisture,” he said. When asked about the value of conservation farming Geoffrey commented, “With more stubble and a friable soil, our crops did not suffer during a six week dry spell, as happened in the middle of the season. They kept pushing out tillers, improving the yield potential while other crops around just stopped. We don’t understand soil improvement nearly enough. We have a lot of learning to do!,” he said.

**TAKE HOME MESSAGE**
- Tramlining showed improve soil structure can increasing water infiltration. More moisture, greater the yield potential.
- Cereal crop break for two years to effectively control grasses.
- Cover crops can have a role to add diversity and better weed control.
- Disc seeders reduce the amount of moisture loss when seeding, especially early seeding.
- No till is more than just machinery it encompasses principles in other areas of management – discipline in rotations being one of them.