Prime land, good location and steadfast seasons

KATHERINE MAITLAND

With a reliable rainfall and consistent seasons, farming in South Australia's lower Mid North region has its benefits for the Parkinson family.

David Parkinson and his father Bob have been farming around Saddleworth, Riverton and Auburn for almost 25 years. The family farms approximately 1,400ha, and average rainfall on their blocks ranges from 475 to 525mm a year. They use 100% no-till farming methods and sustainable management methods.

"One of the advantages of farming where we are is the steadfast seasons and reliable rainfall," David said. "We are also lucky to be located close to ports, markets, machinery dealerships and services.

"We run a fairly basic farming system, using no-till farming methods and crop rotations. We have a mix of black, selfmulching clays, sandy soils and red-brown loam that is common in the mid north region.

"Each year, we follow a strategic crop rotation program of durum, wheat, canola and beans. Depending on the year we may grow a paddock of hay as required, but not every year."

This season David's cropping program consists of 47% bread wheat, 22% beans, 21% durum, and 12% canola. The canola area is down 15% on last year, due mainly to the nature of the rotation.



DAVID PARKINSON, GRAIN FARMER IN SOUTH AUSTRALIA'S LOWER MID NORTH.



PRIME FARMING LAND IN SOUTH AUSTRALIA'S MID NORTH.

"We use beans and canola as break crops and don't like to sow these crops too close together. This improves the nutrition of the soils, whilst also keeping the disease pressure down for the canola and beans," he said.

While the Parkinsons' farm is favourably located in a reasonably reliable area, David works hard to ensure he uses the best practices available to increase yields and quality.

"In the past we would wait until a rain event to sow, even if that meant risking the growing season and daylight hours.

"These days, many of our practices have changed. We usually sow around mid to late April and are often finished by the end of May.

"Last year we started seeding just before ANZAC day. We sowed the canola then sowed beans, durum and finally wheat.

"We work on seeding rates of around 2-2.5kg/ha for canola and 80-100kg/ha for wheat. We adjust our seeding rates for a variety of different reasons, including weed competition and time of sowing."

"We are heavily reliant on pre-emergent chemicals such as Boxer Gold and Sakura. "Our average ground speed when sowing is approximately 7.5km/hr for canola and 8km/hr for cereals. We use deep-banding boots that allow for more effective seed and fertiliser placement improve crop safety, particularly for canola."

In addition to sowing earlier in recent years, David has changed the rate and timing of his nitrogen application.

We keep our seeding rates and depth to where we want them to be. However, we still check every scenario each year to ensure we adapt where necessary.

"We now apply urea throughout the year, which we never used to do. We use 200-250kg/ha of urea over two or three applications throughout the growing season. This has helped improve our yields and our canopy management.

"On the wheat and canola we apply 100kg/ha DAP with 1% zinc. In the past few years we have used Intake to reduce



TOP LEFT: PRESS WHEELS ON THE MORRIS CONCEPT 2000 BAR AIR SEEDER. DUE TO REDUCED SEED SOIL CONTACT, THE FINGER TYNE HARROWS WERE REPLACED WITH PRESS WHEELS. TOP RIGHT: THE 370-TWIN BOX AIR CART ON THE MORRIS CONCEPT 2000 BAR AIR SEEDER. ABOVE: DAVID PARKINSON WITH HIS MORRIS CONCEPT 2000 BAR AIR SEEDER.

blackleg on canola. All beans are sowed with DAP and 1% zinc."

Monitoring machinery operation and making modifications to improve performance has also helped David's overall management strategies.

"We have a Morris Concept 2000 bar air seeder with a 370 twin-box air cart. The cart holds 12,500 litres and the bar width is 12.5 m. We have found this is the best machine for our range of soil types as it enables us to work through all our soil types with ease. The only disadvantage is that it does not have the highest standards for seed placement.

"Adding deep-banding points for seeding canola has improved the seed bed and reduced slug populations in the black soil. We were very happy with a Flexi-Coil bar we had for 16 years and decided that when we upgraded we wanted a machine similar to the Flexi-Coil. The first year we had the Flexi-Coil we used the standard tynes on 230 mm row spacing and finger-tyne harrows, but that combination did not give good enough seed-soil contact and we replaced the harrows with press wheels.

"The new Morris bar is set up to sow on 255 mm row spacing, which enables us to work at a higher speed and improves crop safety. We also changed the seeding boots to improve seed and fertiliser placement.

"Our points on this machine are 16mm. The narrow points and deep-banding boots assist with crop safety in the cereals and canola and we have altered the trash guards to improve the trash handling ability. "We know this machine will go out and do what we want it to do year after year but we still keep a close watch on seeding rates and depth and check every scenario each year to ensure we adapt where necessary."

David is constantly reviewing his seeding program; checking calibrations, seeding rates and blockages as he goes and changing settings and systems as necessary to address any issues.

"We check our calibrations every year. The seeder has an electric-over-hydraulic system that is accurate and consistent but will vary depending on seed characteristics. During seeding we check rates on different varieties to ensure consistency.

"We also check the seed boots for any blockages at each fill or every 20-25ha to ensure there are no issues, especially on the heavy, self-mulching soils. The lumpier soils can upset the air flow and block the boots on the turns."

One of the advantages of farming where we are is the steadfast seasons and reliable rainfall.

David places a high priority on maintaining healthy soils.

"Soil conservation is vital to our farming practices. In the drier summer months our black soils tend to dry up and crack. If we don't receive a good rain in autumn this can sometimes compromise our seeding program.

"There's not a lot we can do to avoid this, which is why no-till farming methods are so important. We try to do as little as possible and avoid breaking the soil too much.

"We are fortunate with our clay soils that ryegrass does not grow as well in these soils as it does on lighter soil types. It loves the sandy soils, so we need to make sure we keep on top of weed issues in those areas and be flexible about when we go into those paddocks."

The Parkinsons take every opportunity during the season to control ryegrass.

"We manage the weed problems as best we can using the boom spray. We spray-top the beans, spray under the windrow on canola and spray bread wheat varieties on maturity." They find that stubble retention helps minimise disease pressure in their bean crops but still need to apply fungicides to respond to disease outbreaks.

David's next objective is to improve his on-farm storage capacity.

"We have used silo bags to store grain on site but grain is generally transported to Viterra at either Bowmans or Roseworthy.

"We have minimal on-farm storage; something we need to consider in our future plans because storage will become more important in time."

David says he is lucky to have his twin

brother, Andrew, as his agronomist.

"I learn a lot from talking to other farmers in the region and it's pretty handy to have Andrew working up the road in his profession in agronomy.

"In the past 20 years we have seen substantial gains in cropping varieties and farming technology but I feel that yield gains may plateau somewhat in the next few years. Hopefully, there is something out there to surprise us.

"Personally, we hope to continue to reap the benefits of no-till farming on our properties and to increase our overall production here in the Mid North."



Please call us: 1300 076 456 e: sms@soilms.com.au www.soilms.com.au