Top of the flocks

Strong genetics key to Anden Stud success

The Donnan family have long been early adopters of new technology and have become industry leaders as sheep breeders and broadacre farmers in Victoria's Mallee region. As a new generation joins the productive mixed family enterprise, they share their story.





he high performance of Anden Stud at Woomelang is the result of the hard work and vision of generations of dedicated Donnan family farmers.

Whilst Andrew and Denita Donnan's farming business spread over 3,800 hectares is a mixed enterprise, they've built their reputation as sheep breeders, being early adopters of new technology and leaders in the industry.

The property is located in Victoria's Mallee region, the heartland of broadacre farming in the state, and is home to the Anden White Suffolks, Anden Ultra Whites and Kerangie Suffolks stud operation.

Andrew says the stud runs about 600 breeding ewes on the farm, typically White Suffolks, but the Ultra White numbers have been built up in recent years.

Currently breeding ewe numbers are 250 each for Ultra Whites and White Suffolks and there are also 95 pure Suffolk ewes on the property.

"We've been increasing the sheep numbers in the operation over the past 20 years. We have been working on producing a consistent line of composite White Dorper/Poll Dorset cross rams for several years with the aim being to produce an easy-care, shedding ram with low to moderate birth weights with a strong structure that are able to do well in any condition," Andrew says.

Donnan family involvement in farming spans several years. In mid-2000, the Poll Dorset Stud, Viewdale was introduced back to the Donnan farm. Viewdale, Flock 368, was originally founded and registered in 1960 by Andrew's grandfather and father, George and Stan Donnan. It went into a recess in the early 1980s before being reactivated in 2006.

Whilst the introduction of the Ultra Whites in 2016 was the last time Poll Dorsets were sold in the Anden Stud sale, Andrew still acknowledges the part the genetics from the Viewdale Poll Dorset Stud has played in the development of the Anden Ultra Whites breeding program.

"The breeding has come from the result of using high performance Dorper and Ultra White sires over our best performing Poll Dorset ewes," Andrew says.

The Donnans are aiming for "easy care" goals such as good shedding ability, fertility, milking and mothering instincts and low/moderate birth weights. Good growth and sound structure, muscling and high yielding carcass across medium-heavy weight carcasses, the right amount of fat, and the ability to maintain exceptional do-ability and hardiness of the Dorper breed are also attributes they are striving for.

Pure Suffolks, those with black faces, came back to Anden in 2010 when Kerangie Flock 2187 was re-activated.

Whilst Andrew comments, it's perhaps a "hobby" to breed the Suffolks, years of genetic selection and hard work has gone into this program.

All three sheep breeds are sold in a combined on-property sale the first Thursday of October each year, attracting buyers within a 250km drive of the farm. What doesn't make the cut is sold over the hooks or at the Bendigo and Warracknabeal saleyards.

The Donnans operate a split mating operation, which has lambs dropping in June and August.

"We get a couple of hundred lambs in a week when in the thick of it," Andrew says.

Andrew's flock has been artificially inseminated for the past 15 years, one of the first in Australia and also uses embryo transfers, with all the semen purchased on our own shores.

When it comes to selecting genetics, he spends a lot of time keeping up to date with what's available and regularly visits studs to view genetics and the rams available.

He doesn't sell his rams' semen regularly, but is open to it if the opportunity arises.

Andrew says whilst there have been advances in artificial insemination techniques over the past 15 years, scanning results had actually decreased.

"We don't know if it's a change to some of the medicines that goes into the sheep or something else. The other theory is that hybrid animals are harder to breed from," he says.

This use of artificial insemination means that Andrew has a surprisingly small number of rams on the farm – generally just one of each breed to be used as mop up rams.

"I generally just use ram lambs - it's better for genetic gain," he says.

Ewe lambs are given an opportunity to join at about eight months old. He says the percentages of maiden ewes of that age varied a lot, sometimes as low as 25 per cent, and the remainder of the flock are mixed aged ewes.

The most important indicator for maiden ewe success is weight, according to Andrew.

"We have to supplementary feed them this time of year normally," he says.

In the second week of April he was able to let them into a paddock with green feed – a pleasant surprise due to some recent rain events.

A key LambPlan figure they have increased over the years is the post weaning weight, lifted from a score of 12 to 17 to 18 across all breeds on the property. It's taken many years to achieve, but Andrew says faster growing lambs is a much sought after trait for both himself and his clients. He believes it's particularly important in the Mallee, where farmers were constrained by a short growing season – typically from the second week of May for just four to five months.





The recent rains have also buoyed confidence in the cropping enterprise, with 2,500ha of wheat, barley, oats and vetch sown each year on the property.

The Donnans had sown 320ha of feed by the first week of April - a mixture of Morava vetch and Winterroo oats.

They will start cereal sowing after Anzac Day this year - more Winteroo Oats, Spartacus barley and Scepter wheat. They are also trialling Yallara oats. The oats and barley will be grazed.

He says, if done right, grazing sheep on crops doesn't take away anything from yields, as long as they are taken out at the right time, and in some cases he believes it can improve it.

Even though 2019 was a bumper year, there was still no spring with the growing season being cut out in September for the past 10 years. Moisture from earlier in the year held the crops on to finish, and a cooler spring assisted, but the last "spring" was in 2016.

Whilst rainfall average for the area is 320mm, the past two growing seasons they've recorded 180mm or 200mm, but despite the lower numbers, Andrew says last year's harvest results were good.

Their wheat yielded 3.2t/ha to 4t/ha and the barley 2.8t/ha to 4t/ha.

"We have changed farming so much in the past 10 years, it's difficult to know what an average is anymore. Timing and sowing earlier, dry sowing if it hasn't rained... We make sure we get all the crops in before the end of May – it's vital in our district. We concentrate on summer spraying to preserve moisture and direct drilling the past 10 years has also been a game changer for us too," Andrew says.



The Donnans are big supporters of the Woomelang's North West Ag branch – Andrew has been supporting the store for 45 years and his father and grandfather before him did as well.

Now his sons Joel and Trent are the fourth generation to support the branch throughout its many owners.

Trent, 26, returned home last year and has joined Joel, 30, in running the farm with their parents.

"It's so much easier, I don't need to go working half the night now," Andrew laughs. "Your own children work more than an employee because they have more enthusiasm for it, they're more invested."

He also says having the next generation who could take advantage of new technology he didn't understand was invaluable to the farm.

He's proud of what his sons can do and knows the farm will now keep getting better each year.

"Last year was the first year Trent was home for harvest, so this year will be a massive gain having that experience," he says.

The Donnans' five children had all left the nest and Andrew and Denita had lived on the farm on their own for a while.

Denita has the "handy role of all mothers and is also the bookkeeper" carefully keeping all the stud's records, spanning several years. In recent times, Joel and his wife Lauren have lessened her load by taking on the stud's LambPlan data entries and refreshing the Anden Stud website and social media.

Joel and Lauren's children Leni, 4 and Arlo, 2, are being raised on the property, which is an absolute delight for their grandparents.

Trent's partner Brigette is a teacher and lives in the house across the road with him as well. Their other children work off farm including Ashlee, 28, who has her own business in the disability support space in Melbourne, Kane, 24, who is a qualified builder at Swan Hill and Wade, 20, who is a third year apprentice builder in Melbourne. The Donnans say Wade and Kane may eventually choose to return home to the farm, whilst Ashlee is building her business and has settled in Melbourne with husband Laurence.

"We're the ones left of about 20 Donnans that started here over the past 102 to 103 years," Andrew reflects. "I don't know why I'm the only one left, we started out in the worst situation."

His grandfather had four brothers and a sister and they branched out everywhere, but for Andrew, farming was always the ambition.

"I guess I just always wanted to be involved in farming," he says.

His toughness and determination has been evident since he was young. Andrew got the nickname Bruiser when he was just 12 and used to play under 16's football. He says he bruised as easily as a nickname sticks for decades in rural communities.

This determination has led to some big accomplishments in his sheep breeding career.

In 2016, Anden Stud broke the record for the highest price paid for a meat ram in Australia with a \$68,000 price achieved for a White Suffolk ram. It went to a stud at Streaky Bay.

Anden Stud has also enjoyed great success at shows, most recently taking out the supreme champion white suffolk exhibit at the 2019 Royal Adelaide Show.

At the same event the stud was also awarded Reserve Champion of all Breeds, Grand Champion White Suffolk Ram and Junior Champion White Suffolk Ram. And, what's a sheep farm without a good sheep dog? Andrew places great value on the importance of having the right working dog, recently paying \$21,000 for two-year-old black and tan male kelpie "Ace" at the Jerilderie Dog Auction.

He says he copped a bit of flack for paying \$3,000 for a border collie 10 years ago, but Andrew knows that "Boss" was worth that and much more.

Now, with the next generation home working on the farm, the Donnans continue to progress their chosen breeds.

"We can always improve. We're trying to get more muscle in lamb without it getting too tough to eat. We're always after better tasting lamb with better eating quality," he says.

For Andrew, the greatest pleasure of years of breeding sheep is when he hears great results from clients.

"As I'm getting older now, I get a lot of joy out of people selling good lambs and getting good prices from them," he says. "They'll call and say 'they weighed heavier than I thought they would'. When you're having a bad day, a call to tell you this really turns it around."

Safflower success

New Australian crop variety provides exciting prospects for grain growers

Article I Rosie O'Keeffe Photography I Tegan Slade, GRDC GroundCover™ magazine



Chris Duff, Delta Ag

he recent commercialisation of super high oleic safflower crops is set to be a game changer for grain growers.

Delta Agribusiness has signed a new exclusivity agreement with GO Resources, which has given Delta the distribution and marketing rights for super high oleic safflower crop growth in south east Queensland, NSW and Victoria.

Research trials in various regional locations last year showed that despite dry conditions, the versatile safflower crop can be a valuable addition to various dryland and irrigated cropping systems, providing a number of strategic, agronomic and financial benefits, as well as cash return.

"The addition of super high oleic safflower crops into the market is cutting edge. It's a brand new crop which I think is going to be really exciting for the industry," GO Resources Research and Development Lead, David Hudson says.

"This is an Australian technology that has been developed and funded by the CSIRO and GRDC, then our Australian company GO Resources has brought this technology to the market, to the growers, and now we have partnered with an Australian company Delta Ag in its delivery, and that's really unique and something we are really proud of." According to David, it was experiencing Delta's approach in the paddock during field day events and trials at Goondiwindi and Quandialla during the 2019 season that affirmed their commitment and enthusiasm for innovation.

"We were impressed with the way they had a real drive to produce new innovations for their growers with both agronomic and economic benefits for them," David says.

Safflower is a winter/spring growing crop that is heat and drought tolerant, proven performance in sodic and saline soils, is suited to both dryland and irrigation farming systems, has low inputs, is low maintenance and easy to grow. It can be used in rotations to effectively break the lifestyle of cereal root diseases like take-all and crown rot. It has an extensive root system which can break up hard-pans and create channels in the soil profile facilitating air and water movement.

Delta Ag's Executive Director and Group Manager Advisory Chris Duff is looking forward to the significant development and market prospects the crop will bring growers.

"It is an alternative crop, it's a risk splitting crop and has a wide sowing window which is another attraction.

"I think it will do well where canola has lost flavour in recent years. It has proven to be drought tolerant too and an alternative break crop in low to medium rainfall areas."

Chris says while safflower crops were planted 20 years ago, a lack of processing facilities and a declining market meant its growth diminished.

"Over the years there has been development in specialty canola oils, but safflowers have a speciality market that is going to be classified as a premium oil in the industrial market and that is where the big interest is coming from," Chris says.

David adds, "We are seeing the opportunities in the biobased oleo-chemical industry and particularly the lubricant industry sector where its benefits and performance are coming to the forefront. Compared to palm, HO soybean and HO canola oils, GO Resources super high oleic oil provides superior thermal properties and functionality which makes it ideal for use in industrial applications such as lubricants, plastics, polymers, cosmetics, paints and inks, biofuels and food. The results have been outstanding. We have had increasing interest in the US, Europe and in Australia. These markets are global markets."

In the 2019 season, 25 growers were involved in its market development year, with 1,700 hectares of GO Resources super high oleic safflower seed planted.

"We had commercial release last year for the first time, and despite it being a drought year, we did get encouraging results and there is significant interest from farmers and agronomists planning to grow it this year," David says.

"The real opportunity seems to be in sodic and saline soils where growers have struggled to get canola to establish particularly in tough years. One of the benefits of safflower is that it has a very deep tap root and while last year the yield wasn't as high as it could be, we had farmers who didn't harvest any canola, but managed to harvest the safflower, so it's definitely a semi drought tolerant crop."



Mixed farmers Bruce Slade (left) and Garreth Brose (right) check a safflower crop with GO Resources Research and Development Lead, David Hudson, on a Quandialla property before harvest in 2019

The safflower market opportunity is offered on a closed loop system, with a guaranteed 'farm gate' price of \$650/mt at the start of the season, taking out the risk to the grower.

Delta Agronomist Leigh Norton was involved in the growth of a safflower crop at "Willaroo", 30km from Goondiwindi last year and is excited by positive results despite a dry year.

"Last year unfortunately there wasn't a lot of profile... but it has performed well in sodic soils and is a good break crop. We received 53mm of in-crop rain last year and achieved up to 2.2t/ha in some areas that were planted early," Leigh says.

"In these northern areas it definitely grew well at the start and seemed to tolerate frosts during the season and low rainfall. We are going to grow 100ha this season on the same property and we are in discussions with another grower who is looking for a different rotation. If it's as frost tolerant as the research has shown, it'll perform well in this region, we are just waiting on a trial screening herbicides to see what may work with weed control. With canola results up and down, it could definitely be the new canola for the north."

Safflower fits well into cereal cropping operations as no additional machinery is required, and David says that an advantage over canola is being able to direct head the crop eliminating the additional costs associated with windrowing.

This season, under the new marketing and distribution arrangements, Delta Ag will be setting up trials, demonstrating to growers where super high oleic safflower can fit into their locations. Delta will then be managing these trials, signing grower contracts, and will be responsible for the distribution of the planting seed.

"Our focus is really targeting south east Queensland, northern NSW, the Riverina and Victoria. The rain falling at the moment has been encouraging and it's building significant interest from the growers and agronomists we have been in contact with and we are looking forward to Delta taking the market opportunity forward into the future," David says.



Last year 1,700ha of safflower crop was planted last year and harvested in south east Queensland, NSW and Victoria