

# Using technology to build a better sheep flock



Kangaroo Island sheep producers are putting emerging agtech tools to the test, trialling a mix of portable equipment and digital diagnostics. Through the Department of Primary Industries and Regions' (PIRSA) Kangaroo Island AgTech Demonstration Program, three livestock producers explored tools to help manage their sheep more efficiently and accurately.

## Building a better flock with fibre testing



#### **Paul Green**

TECHNOLOGY: Woven Optics

LOCATION: Birchmore

PROPERTY SIZE: 800 hectares

ENTERPRISES: Sheep

For Birchmore sheep producer Paul Green, breeding prime lambs has always been a balancing act between maintaining high lambing percentages and lifting wool quality from his composite ewes. Traditionally, he assessed ewes visually for finer fibre, but with slow feedback loops and room for error, he was looking for more certainty.

That led him to trial Woven Optics, a South Australian-developed device that digitally assesses fibre diameter in real time.

"We just wanted to cut out the poor performers," Paul says.

"We want to aim for 24 to-26-micron wool, but without compromising lambing. To be honest, we weren't always confident in our visual assessments."

Woven Optics is a handheld fleece micron tester and eID scanner, designed to measure wool micron on-farm and in real time, with results delivered within two minutes.

The initial plan was to test wool directly on live animals, but the early-stage prototype device had trouble reading moving sheep. To overcome this, Paul collected wool samples from 20 sheep, cleaned them, and used the device for analysis.

"In hindsight, we probably sampled at the wrong time of year—January was just too dusty," Paul says.

"Cleaning took time, but the results were encouraging. Between 30 to 40 per cent of samples were coarser than we wanted, which backed up our own assessments."

Although Paul will not be adopting the first Woven Optics prototype just yet, he sees strong potential.

"By eye, we can class 700 head a day, versus 100–200 with the Woven Optics device, but that will improve," he says.

"This sort of tool gives you confidence your decisions are right."

Paul says he was impressed with the developer support.

"Vicky from Woven Optics was brilliant. She FaceTimed us and took our feedback seriously. It really felt like a collaboration."

Paul says the experience using the Woven Optics device reinforced his view that agtech has a major role to play in farm management decisions.

"Human error is always going to be there, but technology is the best way to overcome that."



### Accurate stud records through digital integration



#### **Malcolm Schaefer**

TECHNOLOGY: Sherwell Y Crate

LOCATION: Wisanger

PROPERTY SIZE: 850 hectares

ENTERPRISES: Suffolk stud

Suffolk breeder Malcolm Schaefer, Wisanger, wanted to make his data more accurate and easier to manage. With records previously written by hand, legibility and errors were a concern.

"I know my writing's not the best, sometimes I can't even read it," Malcolm says.

"When the opportunity came to try the Sherwell Y Crate with integrated electronic identification (eID) scanners and weighing, I jumped at it."

The crate automatically scans electronic tags and displays weights via mobile phone, streamlining a task that was once manual and error-prone.

"It's easier, faster, and more accurate," Malcolm says.

"That gives you more confidence in your records, especially for a stud operation where detail matters."

Malcolm is already seeing benefits beyond the trial.

"We've started using Sherwell eID tags now because they have great retention. I'm looking at linking the data straight into spreadsheets next.

"It's just a more reliable system."

### Time-saving hoof care with cordless shears

### Josh Graham and Ben Brind

TECHNOLOGY: Mobishear

LOCATION: Duncan

PROPERTY SIZE: 4000 hectares

ENTERPRISES: Sheep, cattle,

cropping



Working at Josh Graham's farm at Duncan, Ben Brind was looking for ways to reduce the strain of hoof trimming across large mobs. His trial of the Mobishear cordless hoof trimmer, designed for safety and speed, made an immediate difference.

"We've got mobs of 1200 sheep and with the Mobishear device, I can go out in the paddock and just get it done," Ben says.

"It's battery powered, cuts cleanly, and it's got a safety stop so you won't lose a finger."

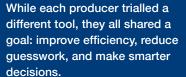
Ben says the Mobishear trimmers reduce fatigue as they require less effort than manual trimmers while the blades stay sharp.

He says the device was intuitive and efficient from the start.

"I just took it out of the box, charged it, and started using it. I'd happily buy two or three for the farm.

"It's a big time-saver."

### A stronger flock through smarter tech





"Anything that helps you make better calls, especially when it comes to improving genetics, is a step forward," Paul says.

"This is just the beginning."

#### About the program

The KI AgTech Demonstration Program, funded by the Australian Government Regional Recovery Partnerships program, allowed KI primary producers to road test technologies free of charge on-farm and share their experiences with other producers on the use and benefits of the technologies.

More information: www.pir.sa.gov.au





