

IN THE CHUTE TECHNOLOGY



Five futuristic technologies that the sheep industry may expect to see on the market in the next decade.

1 ROBOTIC SHEARING

Modern robotics are being developed to tackle labour shortages and reduce physical strains in the shearing industry. Powered by electric motors and computer programming, these mechanical armed robots are testing on 3D printed sheep to mimic real life movements during shearing. The robotic system is designed to work in conjunction with manual shearers to:



REDUCE FATIGUE



REDUCE BACK STRAIN



IMPROVE POSTURE

SHEEP HERDING DRONES

Drones are quickly becoming an effective piece of farm equipment - taking root in the ag-industry's automation era to herd and monitor livestock.

Applied heavily to crop agriculture for field mapping and crop scouting, drones are now being designed to mimic the bark of a dog as an aid in sheep herding and monitoring to:



MOVE LIVESTOCK FASTER

REDUCE SHEEP STRESS

MONITOR FLOCK & PASTURES



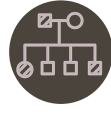
3 SMART TAGS



Radio frequency ID tags are not a new technology, but they are becoming more sophisticated and used for real time automated tracking, monitoring and assessment of a flock. Designed to be low cost and long lasting, Smart tags come as ear tags or temporary collar tags for use on pre-weaned lambs. Large sums of individual animal information can be captured by the device over an animal's lifetime including:



IDENTIFY LOCATION



ESTABLISH MATERNAL PEDIGREE



MONITOR ACTIVITY

4 INFRARED RADIATION THERMOGRAMS

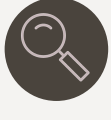
Thermal imaging (TI) is not a new concept, but it is finding a new place in early detection of disease and injury in livestock. TI trials have been able to accurately diagnose respiratory illness weeks before clinical symptoms appear. Early detection of ailments by TI is proving to improve overall flock health with the potential of:

Lower vet costs | Reduced antibiotic use | Less mortality



5 FACIAL RECOGNITION

Facial recognition technology may one day replace the use of electronic IDs. Through a machine-learning model, sheep can be identified individually by their unique facial features, and data captured can be linked to other digital systems to better understand and track behaviour. In addition to identifying animals, this futuristic technology will also:



MONITOR BEHAVIOUR



TRACK LOCATION



ASSESS DISEASE STATUS



ESTIMATE WEIGHT & PARENTAGE