

Populated with Workshop findings
MERREDIN 10 AUGUST 2010

Vision: the challenge for 2030	Themes: milestones to achieve vision	Strategy: plan to achieve milestones	Action: actions implementing plan	Priority	Time frame
Increased on farm profitability	Increased productivity and reduced input costs	Refined animal husbandry	Fly biological control (South African wasp) ** cross reference with Information distribution through targeted communication topics, timing and content strategy Fly centric research and sterility genes Research to maintain diazinon use in dip Research to preservation of dipping as a treatment option Research risk factors for fly strike (age, fibre) Investigate mobile water systems to lower costs ** cross reference with labour efficiency strategies Research pre-operative analgesia for tailing and castration Research semen treatments for sex selection Research identification alternatives (microchip, RNA, DNA, tattoo) Relationship between shelter and water consumption: not explored Long distance transport and live export: not explored	High High Medium High Low	Short Medium Short Long Long
		Labour efficiency improvements	<p><i>Wool shearing:</i> Research into alternative fibre cutting mechanisms (laser literature review and scoping) Portable/ mobile (chain shearing) shearing infrastructure: revisit previous R&D in light of current technologies Shearing ergonomics: robotic shearing: revisit with current technology and computer capabilities</p> <p><i>Wool harvesting:</i> Identify endogenous chemicals of regulation of defleecing across all weights and age groups, and logistics</p> <p><i>Animal husbandry:</i> Cost benefit analysis of lick feeders as a delivery mechanism Immunocastration Cost benefit analysis on age of sale for lambs without tailing or castration/ interaction with growth rates and genetic gains Virtual fencing/ satellite control of sheep movements linked to electronic sheep identification Movement patterns and sheep taste preferences (relating to taste of drenches) for ease of management Research and develop injectable systemic lousicides Delivery of treatments and supplements in water</p> <p>Research sheep aptitude for behavioural training for self treatment Research trait selection for behaviour **cross reference genetic tool development</p>	High High Commercial interest High Commercial interest High Short Medium Short High High	Short Short Medium Commercial interest Short Commercial interest Short Medium Medium Short Medium Short Short

			and uptake strategy		
		Genetic tool development and uptake	<p>Research and development of lice resistance traits **cross reference with animal husbandry improvements strategy</p> <p>Investigate cross parasite resistance</p> <p>Research and development of temperament/ behaviour traits ** cross reference with labour efficiency improvements strategy</p> <p>Information on performance when genetics removed from environment in which originally measured, and relevance to alternative environments</p> <p>Cost benefit analysis on new traits</p> <p>Selecting for meat production traits in wool producing sheep</p> <p>Investigate correlation between neck folds, productivity and animal welfare</p> <p>Research and development of traits for wool characteristics: elasticity, softness, light refraction, faster growing fibre (twice yearly shearing)</p> <p>Research breeding tailless sheep</p>	<p>Low</p> <p>Low</p> <p>High</p> <p>High</p>	<p>Med-Long</p> <p>Med-Long</p> <p>Short</p> <p>Short</p> <p>Medium</p>
		Reproductive efficiency	<p>Extension and adoption on farm of reproductive efficiency traits and best practice animal husbandry to improve reproductive efficiency: predation, nutrition, time of lambing, shelter ** cross reference with genetics and mortality strategies</p>		
		Reduced on farm mortality	<p>Feed supplementation (minerals, energy, protein, vitamins) for identified targeted situations and seasonal conditions including in periods of climate stress ** cross reference with adaptable pasture systems strategy</p> <p>Fox control options</p> <p>Support wild dog control through research supporting continued use of 1080 and animal welfare impacts</p> <p>Extend lessons from CSIRO Eagle Ecology study</p> <p>Quantify animal numbers taken by predators by season, to support seasonal management plans</p> <p>Investigate food supplementation schemes for protected species, to address on farm predation levels</p> <p>ARGT pasture based early warning test</p> <p>Literature review to build case for wider commercial application based on subclinical production loss countered by ARGV vaccine</p>	<p>High</p> <p>High</p> <p>High</p> <p>High</p>	<p>Short</p> <p>Short</p> <p>Short</p> <p>Short</p>

		Adaptable pasture systems	<p>Pasture genomics research to improve species and adaptability addressing climate adaptation and complementarity with mixed farming systems NPKS use efficiency and alternatives (soil/ supplement) through pasture genomics and investigating interaction with soil microfauna and flora, other minerals and additives **cross check with agronomist Application methods for low input systems: not explored</p> <p>Economic analysis of accuracy measuring dry matter/ protein/ mineral components of pastures on farm adapting existing tests (rapid on farm) or technology advancements in infra red spectroscopy New biological rabbit control Investigate methods of improving soil moisture retention Use of crop refuse: not explored Optimising feed supplementation and pasture base in cropped areas/ paddocks (March/ April) Maximising fodder production in non cropped areas on farm eg acid soils Establishment and persistence of perennials in cropping systems</p>	High High High High	Short Short Short Short
Sharing in the value chain at low risk	Effective, efficient and open communication supply chains ** check terminology vertical integration?	Accurate supply chain intelligence	Establish and facilitate dialogue both up and down the supply line, between the growers and retailers/ consumers/ processors by distance or in person, to encourage through sector understanding of constraints, opportunities and early identification of credence characteristics to enable rapid response		
Consumer confidence in wool products	Meet market demands for product integrity and quality	Assess and address credence characteristics	<p>Identify benefits associated with delivering and verifying credence characteristics on farm Establish and facilitate supply chain dialogue over verifying credence characteristics on farm without traceability post farm gate (such as wool blending) Traceability post farm gate</p> <p>Science for marketing natural and welfare claims triggered by market signals</p>	Commercial interest	Commercial interest
		Address wool prickle factor	Link fine ends wool program to on farm practices		Short
Consumer confidence in the wool farming system	Recognised environmental and farming system credentials	Addressing climate variability	<p>Information to allow flexibility of farming systems to balance impact of climate variability of dual system Increased accuracy of modelling over 12 month predictions ** cross reference to pastures strategy and on farm mortality strategy Indian Ocean dipole research identifying regional Western Australian impact</p>	High	Short

