

2022-24 Producer identified RD&A priorities

Council: SALRC

| Program area | Priority Rank | Committee origin | New or ongoing priority? | Outcome sought | To adequately achieve the outcome, identify R&D and/or adoption gaps or strategies <ul style="list-style-type: none"> For R&D, clearly identify the research gap. For adoption, detail a possible strategy that producers would engage with to achieve the intended outcome. |
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| Animal wellbeing | 1 | SNSW,WV, SA, NNSW, CV, CWNSW | New | Best practice management of unmulesed flocks | RD&A: <ul style="list-style-type: none"> Testing/demonstration of best management practices and animal welfare benefits of non mulesed flocks Incorporate credible declaration processes for sheep not subjected to mulesing Develop pathways and target date for ceasing mulesing of all Merino sheep |
| Animal wellbeing | 2 | SEVIC/TAS, SNSW, NNSW, CV, SA, WV | Ongoing | Improved, integrated techniques for prevention and treatment of internal parasites in sheep and cattle and flystrike in sheep, to improve production and reduce resistance | RD&A: <ul style="list-style-type: none"> Improved techniques for the prevention and treatment of internal parasites in sheep and cattle to increase efficacy of treatments and reduce drench resistance Include management of Barbers Pole worm emerging in new areas in response to climate change Best practice case studies of Barber-vax Improve on-farm worm egg count tools for both sheep and cattle Management of flystrike prevention in areas with resistance to current chemical options |
| Animal wellbeing | 3 | NNSW, CV, SA, SEVIC/TAS, WV | Ongoing | Develop and promote to the broader community, best practice codes of conduct for animal welfare and objective measures of livestock wellbeing | RD&A: <ul style="list-style-type: none"> Develop guidelines for best practice pain relief across livestock industries Best practice guidelines for producers must take into account different production systems in different agri-climatic zones Identify residue risk for meat products from the use of pain relief Find alternatives to use of antimicrobials while maintaining animal health and welfare |
| Feedbase | 4 | SEVIC/TAS, SNSW, | Ongoing | Develop improved grass and legume cultivars, mixes and management guidelines to improve pasture | RD&A: |

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| | | NNSW, CV, CWNSW, SA, WV | | performance-production, persistence, feed quality, nodulation, N fixation, low bloat, low endophyte, seed production, weed control | <ul style="list-style-type: none"> • Alternative, new pasture species for high and low rainfall regions and increasing climate variation • Develop new legume cultivars and management guidelines to improve performance in terms of production, nodulation and low bloat through (potentially, but not limited to) the use of tannins to reduce methane emissions but not limiting productivity and persistence • Include assessment of productivity of multi-species perennial pastures and cover cropping (incl forage brassicas) • Filling feed gaps • Increase feedbase diversity to build resilience-including native pasture species • Monitoring and controlling weed encroachment • Develop and improve adoption of best practice pasture sowing and management to improve establishment, production and persistence • Monitor and understand the development of insecticide resistance by insect pests of pastures such as red legged earth mites and blue green aphids |
| CN30 | 5 | SEVIC/TAS, CV, CWNSW; NNSW, SA, WV, SNSW | Ongoing | Develop extension programs and standardised, affordable measuring and monitoring tools to enable cost effective monitoring and reporting of the environmental sustainability and carbon footprint on farms | <p>RD&A:</p> <ul style="list-style-type: none"> • Raise awareness of achievable carbon balance targets for producers and where they sit in relation to CN30 • Identify key, measurable elements of environmental sustainability on farm and how this can be linked to regenerative agriculture and other concepts/models for sustainable farming • Improved, cost effective tools and processes to allow producers to evaluate and compare options for building carbon stores on farm and the long term returns associated with it. • Evaluate and demonstrate whole farm benefits of management interventions for net carbon reduction, water security, livestock shelter belts, agroforestry, production efficiency • Establish a single point for livestock industry accreditation, carbon balance assessment and audit capability |
| NA | 6 | SEVIC/TAS; CWNSW; WV; SA; SNSW | Ongoing | Build human capacity and professional pathways on farms and in Ag service providers | <p>Adoption:</p> <ul style="list-style-type: none"> • Develop programs aimed towards recruitment and upskilling staff to increase their value to the business • Create professional learning and career development pathways • Re-brand working in agriculture as a highly skilled profession with opportunities for career progression • Case studies on what successful employers are doing |

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| | | | | | <ul style="list-style-type: none"> • Implement best practice governance policies on farms • Increased awareness and training in the use of agri-tech • Include financial planning and business management elements • Develop a one stop shop for beef education so producers can easily access and follow educational pathways • Specifically promote career opportunities on farm and in research and advisory ag services providers in rangelands areas • Identify barriers to adoption in rangelands areas |
| Beef | 7 | SNSW, CV, NNSW | Ongoing | Develop tools to assist producers avoid stock losses from bloat | RD&A: <ul style="list-style-type: none"> • Develop new, alternative methods for bloat treatment, including non-antibiotic options • Evaluate/demonstrate prevention treatments, early warning systems to identify high risk, grazing management, non-bloating legume varieties |
| Beef | 8 | WV, CV, NNSW, SA | Ongoing | Improve the conception rate from AI in cattle | RD&A: <ul style="list-style-type: none"> • Target-90% |
| Sheep | 9 | SEVIC/TAS, NNSW, SA, WV | Ongoing | Develop and evaluate genetics and management tools (including joining length, lambing group size, post-lambing management, scanning) to reduce reproductive wastage and reduce turn-off times in sheep flocks | RD&A: <ul style="list-style-type: none"> • Measure lamb survival rates and identify opportunities for improvement including scientific understanding of physiological constraints • Develop breeding values for lamb survival and maternal traits that will improve lamb survival • Increased extension of current best practice including taking into account feed costs in variable environments and predator control • New strategies to improve ewe fertility and lamb survival to weaning • Long term evaluation and demonstration of precision management of reproductive processes (joining length, lambing group size, post-lambing management, scanning) to decrease mortalities of ewes and lambs • Precision weaner management with the goal to halve turnoff times |
| Feedbase | 10 | SEVIC/TAS, SNSW, NNSW | New | Improved soil fertility management to underpin productive pastures. Strategic use of fertilizers (traditional and new)-measurement of responses across a range of soil types and regions | RD&A: <ul style="list-style-type: none"> • Improve fertilizer use efficiency • Include gibberellic acid and sulphur responses • Decision support matrix based on fertilizer cost and predicted response to application • Better management of soil acidification and soil pH amelioration options to reduce constraints to pasture production • Alternative fertilizers-the science behind them and performance relative to conventional options |

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| | | | | | <ul style="list-style-type: none">• Evaluation and adoption of P-efficient legumes |
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