

Sustainable Grazing on Saline Lands: a new national research program addressing animal production on saline grasslands

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Sustainable Grazing on Saline Lands (SGSL) is a new nationally focused research program aiming to develop profitable and sustainable options for grazing land affected by salinity. Research sites are spread across South Australia, Victoria, and New South Wales and are linked to similar research under the same program in Western Australia and a series of producer-initiated projects in each of the states. All projects aim to encourage improved management of saline land by providing practical, profitable, and regionally relevant grazing options. Environmental benefits resulting from the more efficient use of surface and groundwater as a result of this work will be measured and potentially include reductions in inputs of salt into rivers, discharge of water into remnant vegetation, leakage to groundwater, and salinisation of agricultural land and enhancement of biodiversity on salinised land.

The New South Wales component consists of three sites in the mid-Lachlan catchment (Young-Cowra region). The focus is on developing perennial grass-based pastures on salt-affected land that support profitable livestock productions and reduce environmental impacts of saline discharge sites. Emphasis will be on determining the economic value of the forage produced for wool and sheep-meat production while comparing salt and water movement from salinised land under both volunteer/naturalised pasture and salt-tolerant perennial pasture (tall wheat grass-based).

The Victoria site, located near Hamilton, is designed to develop grazing management strategies for tall-wheat-grass-based pasture systems with both current (strawberry and balansa clover) and new (*Melilotus alba*) legume species to maximise productivity

(including out-of-season liveweight gain), persistence, and the sustainability of the whole system.

In South Australia, research sites in the Mt Charles area of the Upper South East will focus on developing grazing management strategies for puccinellia-based pastures to maximise plant and animal productivity, persistence (especially of balansa clover), and overall sustainability. In contrast, work at a number of sites in Western Australia will focus on saltbush.

All sites will have a strong emphasis on economic analysis of the developing systems, as well as on their impact on biodiversity. There will also be

demonstration areas of salt-tolerant, commercially available pasture species, such as balansa, strawberry, subterranean, berseem, and persian clovers; saltbush; bluebush; and subtropical grasses (e.g., Rhodes, panic, and signal grass).

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