

Southern NSW Drought Resilient Mixed Farming System Trials

Winter Field Day, 28th July 2026

Project objective: Improve whole-farm drought resilience of mixed-farming systems.

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Wagga Wagga Long-Term field experiment details:

Twelve self-contained farmlets have been established on Ashmont Farm, Wagga Wagga. Each “farmlet” consists of 12 (Systems 1-3) or 4 (System 4) sub-paddocks (0.2 ha). The systems integrate all components of a mixed-farm enterprise (dedicated pasture and cropping phases integrated with self-contained flocks of Crossbred ewes. Ewes are joined in confinement during January/February and lambing in June/July. The experiment has 4 defined ‘systems’ treatments:

1. ‘Wolfe’ - Traditional mixed farming

60% cropping: 40% pasture mix, incorporating a legume treatment (faba beans) within the cropping phase and opportunistic dual-purpose crops in conjunction with a 5-year lucerne/sub clover phase. This system focuses on crop/livestock production within dedicated phases.

- Pasture/crop sequence: L-L-L-L-L-C-DPW-B-F-C-W-B.
- 5.3 ewes per ha lucerne

2. ‘Kirkegaard’ - High intensity mixed farming “Kirkegaard/CSU” treatment

60% cropping: 40% pasture mix with increased focus on inclusion of multiple dual-purpose crops and vetch within the cropping phase in conjunction with a 5-year lucerne phase. This system has increased focus on livestock production and carries a higher whole farm stocking rate.

- Pasture/crop sequence: L-L-L-L-L-C-DPW-B-V-C-DPW-B
- 7.3 ewes per ha lucerne
- Vetch-mix (V) included vetch, oats, turnips and arrowleaf clover

3. Ley farming “O’Hare” treatment

50% cropping, 50% annual pasture with a self-regenerating ley pasture phase.

- Pasture/crop sequence: CL-CL-C-W
- 6.1 ewes per ha clover

4. Continuous cropping treatment

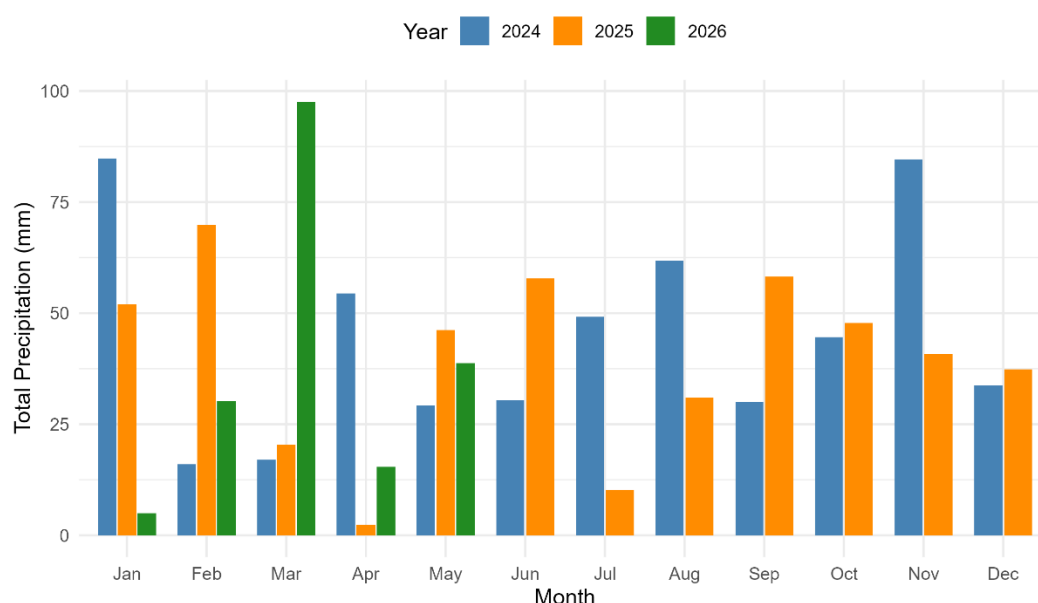
This system is 100% cropping, with no dedicated pasture phase or livestock production.

- Crop sequence: F-C-W-B-F

Table 1. 2026 Crop Details

Crop Type	Variety	Sowing Date	Grazing management
Wheat	Ironbark	14 th May	No grazing
Barley	Neo CL	15 th May	No grazing
Clover	Bartolo & Zulu Max	25 th March	Newly sown plots included in the grazing rotation from 1 st of June.
Vetch Mixture	Timok Vetch, Zulu Arrowleaf Clover, Yarran Oats, Raddish	20 th March	Light graze 1 st June (15-28 days). Return to grazing post lambing.
Faba Beans	Imi-Tolerant	28 th April	No grazing
Canola	PY432T	21 st April	No grazing
Dual-Purpose Wheat	Illabo	7 th April	Rotational grazing during lambing*
Canola – Grazing Option	PY525G	19 th April	No grazing
Lucerne & Sub-clover	Stamina GT6, Coolamon & Forbes	19 th April	Newly sown plots will be lightly grazed in August.

*The High Intensity & Traditional ewes grazed the DPW for ~33 days, whilst the Ley ewes grazed for ~46 days.



Graph 1: Monthly precipitation at the Wagga Wagga Long-Term Field Trial (2024 – 2026).



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Sheep Management:

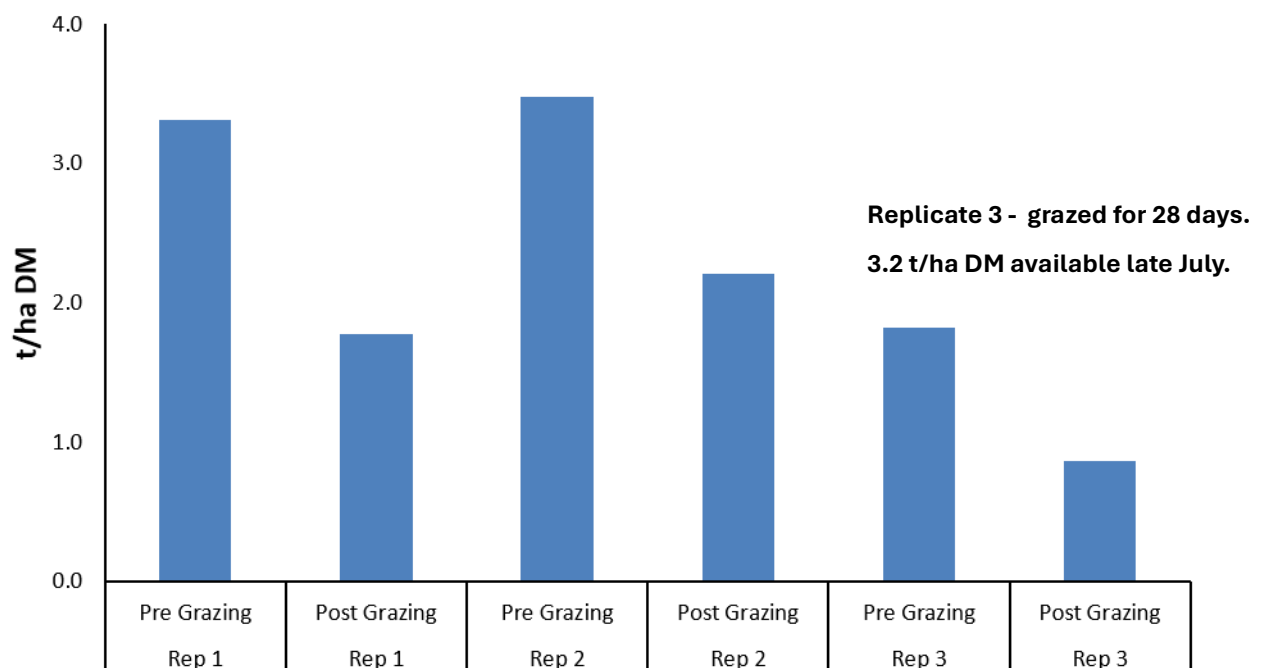
- All ewes joined together in confinement (5 weeks) and fed a ratio of 90:10 barley:fabas.
- Ewes commenced lucerne rotations late March, clover rotations commenced late April (supplemented by background sub clover).
- Scanning rate of 134%
- Lambled down on DPW

Sheep Feeding Cost for 2026

- 74 c/hd/day feeding cost during joining
- 8 c/hd/day supplement feeding cost for Traditional
- 11 c/hd/day supplement feeding cost for Ley & High Intensity

Early sown vetch production:

- Sown 20th March and grazed mid-May – early June
- Grazed between 15 – 28 days, dependent on lucerne availability
- Removal of > 1t/ha biomass
- Grazing commencing late July > 4-5 t/ha DM available



Graph 2: Available biomass (t/ha DM) in the Vetch Mix (mid May – early June). Ewes at a stocking rate of 14.9 DSE/ha.

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**CSU Farms
Wagga Wagga**

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E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
C	CI	CI	DPW	C	CI	W	C	L	L	L	L
F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14
CI	DPW	C	CI	CI	DPW	L	B	DPW	C	F	B

E20	E21	E22	E23	E24	E25	E26	E27
DPW	C	L	L	L	L	L	B
F20	F21	F22	F23	F24	F25	F26	F27
W	C	F	B	DPW	DPC	V	B

