

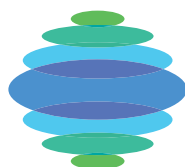
# Grapevine management guide 2025–26

NSW PRIMARY INDUSTRIES MANAGEMENT GUIDE



Compiling author: Penny Flannery





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# Grapevine management guide

## 2025–26

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# Freeman Vineyards

Dr Brian Freeman, Freeman Vineyards, Hilltops, NSW

200 hectares of vineyard, 300 hectares of other enterprises (including sheep farming).

## Overview of sheep integration

Dr Brian Freeman has been grazing sheep at Freeman Vineyards for 15 years. Sheep play a key role in the vineyard, primarily helping to reduce weeds and trim shoots. Sheep grazing is flexible, adapting to the seasonal conditions and the specific needs of different vineyard blocks. Typically, the sheep are moved in and out of vineyard blocks based on vine growth cycles. The sheep are removed from the vineyard when legumes are seeding, as under-vine legumes are essential for adding nitrogen to the soil, which can promote vine health.

## Breed selection

- **Current breed:** Wiltipoll was chosen for its easy-care characteristics and ability to self-shed wool.
- **Previous breed:** Old English Southdown were phased out due to issues with wool, flies, lice, and the need for regular shearing.

## Grazing practices

- Sheep are grazed in a varied pattern, depending on seasonal conditions. This requires flexibility when moving between vineyard blocks to prevent damage to vines during critical growth periods.
- The typical flock size can vary, with 300 sheep currently in a 20-hectare vineyard block. However, in early December, the sheep will be moved to neighbouring paddocks as part of rotational grazing.
- Sheep selectively graze, which can result in problem weeds such as couch (*Elymus repens*) and red grass (*Bothriochloa macra*) becoming dominant. Couch and red grass are C4 plants and are very competitive with the vines for nutrients and water.
- All grazing is carefully monitored to prevent overgrazing, especially when legumes are seeding.

## Vineyard management adjustments

- Sheep graze up to about 1.3 m so a cordon of 1.1 m is too low to keep sheep in the vineyard all year. The sheep are in the vineyard during winter, introduced again when the fruit has set and then removed just at veraison. It is important to monitor the sheep closely to prevent damage to the vines (Figure 52).
- A cordon at 1.2 m is ideal for erect varieties such as Shiraz, Cabernet Sauvignon and Grenache when the vines are grown east-west without foliage wires. Sheep will eat the leaves off low-hanging shoots and long shoots that hang down (Figure 53 and Figure 54).



Figure 52. Older vines (left) next to retrained vines (right) where the sheep were allowed to graze excessively.



Figure 53. Leaves eaten from shoots under the cordon.



Figure 54. Leaves eaten off retrained vines where the cordon is at 1.2 m, while bunches are not eaten.

## Economic and environmental benefits

Grazing sheep in the vineyards has:

- reduced the need for mechanical mowing and weeding (Figure 55), herbicide use and vine trimming, which has led to labour and cost savings.
- reduced costs associated with machinery use, particularly diesel for mowing, spraying, and de-suckering.
- improved soil health due to the reduced need for mechanical intervention and herbicide use; however, the exact effect on soil health is still being studied by analysing microbiology, nutrition and pasture species.
- provided additional income from meat production: sheep are raised primarily for meat, which is sold through sale yards.



Figure 55. Wiltipoll sheep and the single cordon at 1.2 m height in the background.

## Challenges

- Fencing in some areas is still being improved to help manage sheep movement and protect young vines and replants.
- Seasonal conditions significantly influence grazing schedules. Sheep must be removed from vineyard blocks with low cordons (1.1 m) at certain times, particularly during the growing season when the vines are more vulnerable, as sheep tend to like grazing on young vines.
- Merlot vines have been challenging, as the sheep tend to prefer grazing Merlot over the adjacent Cabernet Sauvignon and Shiraz. These blocks have been fenced off to prevent damage.
- Due to sheep selectively grazing, it can result in problem weeds becoming dominant.
- During drought conditions, when there is insufficient vegetation between the vine rows, the sheep will climb the vines and remove too many leaves, so it is important to monitor the vines carefully in dry seasons.

## Vineyard-specific practices and challenges

- **Corvina block:** Brian has retrained the vines to a 1.3-m height with closely planted rows (1 m apart). This has helped improve grazing management, as closely planted vines are less vigorous and have less foliage.



- **Shiraz and Cabernet blocks:** the Shiraz vines are maintained at 1.1 m and the Cabernet vines at 1.2 m. The older Cabernet vines (planted in 1998) are less prone to grazing due to their height and maturity, whereas young vines are more susceptible to grazing and are protected by fencing.
- **Viognier block:** this block has not been pruned since 2011, resulting in compact bunches with small berries. This has reduced disease pressure. The grapes are harvested for botrytis wine. The sheep graze these vines, providing the primary management for shoot trimming and growth regulation.

#### Additional considerations

- **Wiltipoll sheep:** these sheep are self-shedding and require minimal maintenance compared to other breeds, which can be advantageous for managing grazing in the vineyard. However, managing grazing height is crucial, especially with younger vines.

#### Looking ahead

- **No immediate changes:** while no immediate changes are planned for sheep management practices, continued improvements in fencing and better management of grazing areas are planned to optimise sheep integration.
- **Continued research:** Brian is interested in further exploring the effect of sheep grazing on soil health and vine quality, particularly to assess the benefits of reduced herbicide and pesticide use.

#### Conclusions

Brian's experience with integrating sheep into the management of Freeman Vineyards demonstrates the economic and environmental benefits of this approach. With significant savings in labour, herbicide use, and vineyard maintenance, the sheep have contributed to both the sustainability and profitability of the vineyard. While challenges remain, particularly with grazing management, fencing, and protecting vulnerable vine varieties such as Merlot, the overall benefits of grazing sheep continue to support the vineyard's regenerative farming practices. Plans to refine sheep grazing schedules and improve infrastructure will likely enhance these benefits even further. Alternative easy care sheep breeds will also be trialled, e.g. Aussie Whites.

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