



SHEEP AND VINEYARD BIOSECURITY RISK

Sheep are frequently agisted in vineyards during dormancy to help maintain the vineyard floor, reducing vehicle movements on wet soils that can add to soil compaction. Many grapegrowers are not livestock managers, nor familiar with animal husbandry, so we encourage all grapegrowers to refresh their understanding on managing sheep.

Using sheep to control midrow and undervine growth is an alternative to slashing and spraying and has the potential to reduce vineyard management costs. However, if you're planning to agist sheep on your vineyard, consider the biosecurity risks and ensure you cover these in a written agistment agreement.

Including biosecurity risks in the agreement can help prevent a plant pest, disease or weed being moved onto your vineyard.

As an agistor of sheep, you also become part of the chain of responsibility for animal welfare when you have the sheep on your vineyard and when you are consigning them for transport off your vineyard.

To protect both yourself as the vineyard owner (agistor), and the potential agistee, the agistment agreement should outline expectations and responsibilities, including:

- Number of sheep and pregnancy status.
- Duration of the agreement.
- Agistment fees and ability to renegotiate.
- Person responsible for caring for livestock and animal welfare.

- Type, quantity and quality of feed.
- Requirements for water sources.
- Containment (fencing).
- Animal identification (to aid in the case of escapees, and/or theft).
- Access to the property by the livestock owner or person responsible for livestock welfare.
- In the unlikely event of livestock death, responsibilities of both parties.

KNOW YOUR REQUIREMENTS BEFORE MOVING SHEEP ONTO OR OFF YOUR VINEYARDS. AS WITH GRAPE SUPPLY CONTRACTS WITH WINERIES, HAVING AN AGISTMENT AGREEMENT MANAGES EXPECTATIONS AND CAN PREVENT ISSUES FROM ARISING LATER.

Having sheep free of pests, diseases and weeds before arrival and knowing where they have come from, including any vehicles used in transport, will enable you to manage associated biosecurity risks. This information is similar to knowing the health status of planting material, vehicles and visitors as part of your normal vineyard activities.

Other important considerations:

The agistment history of the sheep: if the sheep have previously been agisted in vineyards in a Phylloxera Infested Zone (PIZ) or Phylloxera Risk Zone (PRZ), do not accept them for agistment in a vineyard in a Phylloxera Exclusion Zone (PEZ). It is also recommended that sheep are not moved for agistment either between vineyards located within a PIZ, or PRZ, or moved between vineyards within these Phylloxera Management Zones (<https://vinehealth.com.au/tools/maps/phylloxera-management-zones/>).

The disease status of the flock: you should know the disease status of the flock you are agisting before they arrive. This may have animal welfare implications, and/or impact the location you choose to agist the animals on your property in relation to tourism.

Weed transfer: to minimise the risk of weed transfer onto your vineyard, ask if the sheep have been on a previous property with problematic weeds. Request that sheep be shorn prior to entering your vineyard to reduce the potential for fleeces to hitchhike weed seeds. Ensure you also advise the potential agistee of any harmful weeds on your property that could be tracked off when the agistment ends.

Agrochemical residues: ensure you advise the potential agistee of any re-entry periods for grazing that apply (these might be from chemicals already applied before the agistment period, or chemical applications planned during the sheep occupancy).

Some agrochemicals have Export Slaughter Intervals (ESI) and pesticide labels must be consulted before livestock enter the vineyard.

Sheep diseases: gain some knowledge of sheep diseases (https://www.pir.sa.gov.au/biosecurity/animal_health/animal_species/sheep) to ensure that you can look out for anything unusual and contact the agistee if you are concerned with the health of the sheep.



Requirements for your state under the National Livestock Identification System (NLIS) for sheep and goats:

The NLIS is Australia's system for the identification and traceability of sheep, lambs and goats. The NLIS mob-based database system enables animals to be traced to their property of birth and last property of residence. It also allows Australia to contain and manage major disease or food safety incidents. Refer to the mob-based movements (MBM) checklist at https://www.pir.sa.gov.au/_data/assets/pdf_file/0008/267227/NLIS_moving_and_selling_sheep_and_goats.pdf for those movements for which you are required to record a MBM; this does include lending animals out as lawn mowers. A 'mob' can be as few as just one animal.

Sheep must be:

- Identified with a readable NLIS device before being moved to any property or location with a different Property Identification Code (PIC). If you keep livestock on your property, you must register the property and get a PIC – refer more information at https://www.pir.sa.gov.au/biosecurity/animal_health/property_identification_code_pic.
- Accompanied by movement documentation, which must be kept for 7 years.

Movement documentation includes:

A '**National Vendor Declaration**' (<https://www.integritysystems.com.au/on-farm-assurance/national-vendor-declaration-nvd/>) or

'**Movement Waybill**' (https://www.pir.sa.gov.au/_data/assets/pdf_file/0003/235155/Alternative_SheepGoat_Movement_Document_nov_2015.pdf). These are mandatory documents that must be completed when you purchase and sell sheep in South Australia but check with other states for requirements; and

A '**National Sheep Health Declaration**' (https://www.farmbiosecurity.com.au/wp-content/uploads/2019/11/National-Sheep-Health-Declaration_fillable.pdf) from the potential agistee. This Declaration is mandatory for all sheep movements in South Australia and for sheep being moved into New South Wales and Tasmania.

For help with the NLIS requirements in South Australia, refer PIRSA Biosecurity Help Desk 1800 654 888, or email pirsa.nlisdatabasenotifications@sa.gov.au.

From 1 January 2025, sheep and farmed goats born on or after this date will need to be identified with an NLIS-accredited electronic identification (eID) tag before leaving their property of birth, and producers will need to record sheep and goat movements on the NLIS database and be ready to scan eID tags (https://www.pir.sa.gov.au/biosecurity/animal_health/animal_species/sheep/eid_sheep_and_goats).



Vineyard infrastructure damage

When agisting sheep in vineyards, you need to consider any off-target impacts on irrigation infrastructure as sheep cross between rows and may damage drip lines. This may occur when rounding up sheep upon exit of the vineyard. Checking the status of the irrigation infrastructure prior to irrigating again once the sheep have exited, is recommended.

Sheep are also prone to rubbing up against vine trunks and posts. This could reduce the viability of buds and spur positions, particularly on low cordon vines.

Nutrient balancing

Nutrient losses from vineyard soil due to livestock agistment are expected to be very small compared to the expected improvements in soil carbon and nutrient cycling.

Upon signing of the agistment agreement

Assuming you have determined that the sheep to be agisted do not pose a potential phylloxera risk to your vineyard and that your vineyard is in a PEZ:

- Ensure you have sighted the NLIS documentation (discussed above) if applicable.
- Discuss farm-gate hygiene requirements of the sheep truck with the agistee: query if the truck has been near vine rows in a PIZ or PRZ within the last 29 days. If yes, communicate with the agistee that this poses a heightened phylloxera risk to your vineyard unless the truck has been heat treated at 45° C for 1.5 hours or at 40° C for 3 hours, prior to leaving the PRZ or PIZ. If this disinfestation has not occurred, request that an alternative truck is required to transport these sheep to your vineyard. Also communicate to the agistee that the sheep truck must be clean of all soil and plant material upon arrival at your vineyard.

Upon arrival of the sheep truck at your vineyard:

- Verify that the truck is clean of soil and plant material upon entry to your vineyard.

- As you would for other visitors to your site, require the truck driver to sign in via your visitor record book and answer questions as to where the truck has been (in terms of phylloxera management zones) in the last 29 days and where the driver has been within the same timeframe.
- Avoid loading/unloading the sheep directly down vine rows.
- Limit unnecessary movement of the driver down your vine rows.
- Retain agistment records for the entry and exit of sheep to your vineyard.

Upon exit of the sheep truck from your vineyard:

- Ensure the truck is clean of all soil and plant material.
- Remember that when you are in charge of an animal, you are responsible for maintaining its welfare. This also extends to transport of your agisted stock. The chain of responsibility for livestock welfare in the transport process includes the receiver after unloading. Meat & Livestock Australia has a free pictorial guide “Is the animal fit to load?” to help assess if your agisted livestock are fit for the intended journey and your responsibilities.

Agisting livestock in vineyards will reduce the reliance on tractor passes for vineyard floor management and weed control with reduction in fuel and herbicide use. This has sustainability benefits for programs including Sustainable Winegrowing Australia.

For further information, refer to Vinehealth Australia’s website www.vinehealth.com.au or phone (08) 8273 0550.