

Biosecurity Update - Safe grazing for sheep

Animal welfare and biosecurity are key issues to consider when putting livestock in the vineyard

Jim Herdman

This article was first published in Winepress July 2025.

GRAZING SHEEP in vineyards is a well-established practice in the wine industry, offering benefits such as vegetation control and leaf plucking, but it comes with responsibilities. By following best practice in animal welfare and complying with movement and biosecurity regulations, vineyard owners and graziers can work together to ensure a safe, sustainable and productive partnership.

ANIMAL WELFARE AND RESPONSIBILITY

The primary concern should always be the health and wellbeing of the sheep. Clear agreements should be in place to define who is responsible for the sheep - the vineyard owner or the grazier. This includes providing access to clean water, shelter, monitoring for signs of illness or distress, and stock management during weather and emergency events.

When sheep or any livestock graze in vineyards, they consume agrichemical residues via grape leaves, sward and soil. Agricultural Compounds and Veterinary Medicines advise that residues must be considered when sheep are used for leaf-plucking before harvest, grazing after harvest, and where Chlorothalonil has ever been used. Check the NZW Spray Schedule for grazing information and withholding periods before stock come into the vineyard.

Some growers may consider using sheep to remove unharvested fruit from vines. While this can be an efficient clean-up method, it introduces a significant health risk to the animals: rumen acidosis. Sheep are ruminants, adapted to digest fibrous plant material like grass. Grapes, however, are high in readily fermentable carbohydrates. When consumed in large quantities, these sugars can disrupt the rumen's pH balance and lead to rumen acidosis - a painful and potentially fatal disorder. Symptoms include diarrhoea, dehydration, loss of appetite and bloat. To reduce the risk, limit access to unharvested fruit, introduce sheep gradually to areas with fruit and monitor animals closely for early signs of distress. Consult with a veterinarian or livestock specialist before grazing unharvested fruit.

REGULATORY REQUIREMENTS

When moving sheep between properties, including to and from vineyards, you must complete an Animal Status Declaration (ASD) form. This provides critical information about the animals' health and history and helps transporters, meat processors and regulators assess risks and ensure food safety.

ASDs are required when moving animals between properties or to a saleyard where there is a different person in charge of the animals or if you're sending animals to slaughter. The ASD must be completed by the person in charge of the animals and can be submitted electronically via MyOSPRI or on a paper form.

While sheep do not require NAIT tags unless exported or used in research, they must be visibly identifiable through ear tags or markings. Accurate records of all sheep movements should be maintained, including date of movement, number of animals, destination and transport company details. These records support traceability and help manage biosecurity risks.

BIOSECURITY CONSIDERATIONS

Biosecurity is a critical aspect of grazing management. Sheep arriving at vineyards should be inspected for signs of disease and for seeds or plant material attached to their wool or hooves. Limiting unnecessary animal movements reduces the risk of disease spread. One significant concern is sheep measles, caused by the tapeworm Taenia ovis, which is transmitted by dogs. A single infected dog can cause widespread contamination. To prevent infection, ensure dogs do not have access to untreated









sheep or goat meat (including scraps, offal and carcasses), treat dogs who are frequently near livestock with a monthly Praziquantel product, and require that dogs not regularly on the property be dosed with Praziquantel at least 48 hours before arrival.

Another serious threat to vineyard operations and sheep grazing is Chilean needle grass (CNG) Nassella neesiana, a highly invasive spear grass. It thrives and spreads rapidly in hot, dry summers when other pasture species die back. CNG out-competes desirable vegetation, making land unsuitable for sheep farming. In vineyards it infests headlands, under-vine areas, inter-row spaces and surrounding hills and is extremely difficult to manage. While CNG doesn't directly affect wine production, its impact on grazing, machinery and personnel can be costly and time-consuming. Control is challenging due to the limited effectiveness of agrichemicals and

the plant's resilience. Prevention is far more effective than control – early detection and proactive management are key to avoiding long-term infestations. CNG now occupies about 3,700 ha across Marlborough, North Canterbury and Hawke's Bay and is regulated under regional pest management plans.

Although New Zealand is currently free of Foot and Mouth Disease (FMD), the potential impact of an outbreak would be severe. FMD affects all cloven-hooved animals including sheep and could lead to a national livestock standstill. In such a scenario:

- All animal movements would stop immediately
- Grazing sheep in vineyards would require special permits
- Additional feed and welfare planning would be necessary
- Infected animals would be culled under MPI direction
- Vineyard operations on affected

properties would likely be slowed or subject to increased hygiene requirements

Vineyard owners should familiarise themselves with FMD symptoms and response protocols to prepare for an outbreak. New Zealand Winegrowers is working with the horticultural sector and MPI to better understand the likely impacts of an FMD response on vineyard operations and ensure wine businesses can continue to operate as normally as possible.

CONTACT:

New Zealand Winegrowers biosecurity team by emailing biosecurity@nzwine.com with any questions or requests for assistance in briefing staff or contractors.