



Biosecurity for Sheep Producers - A Simple Plan to Minimise Disease or Pest Plant Introductions

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Introduction

Biosecurity means maintaining freedom from diseases and pests that do not currently exist on a property. The consequences of a serious disease outbreak may place the entire enterprise at risk. By having in place a clearly documented set of disease prevention and control strategies, producers can greatly reduce both the risk of disease entering or spreading within the property. While some diseases can be windborne and their entry cannot be totally prevented, having a well planned biosecurity strategy will help prevent the major production limiting diseases entering your farm.

Sheep arriving on the property

Introduced sheep present the greatest risk of disease introduction. Sheep can appear healthy while at the same time carrying a range of diseases, including external and internal parasites, as well as a variety of noxious weed seeds.

Purchasing sheep that have the least disease risk **must** be a primary aim of farmers when buying sheep. Diseases such as footrot or Johne's disease have the ability to seriously disrupt the enterprise. The risk associated with buying infected sheep cannot be totally eliminated, but can be significantly reduced by making careful enquires and obtaining a signed vendors declaration regarding the health status of the sheep.

Isolation of introduced sheep must also be a priority. Confining mobs of introduced sheep to an isolated paddock should not prove too disruptive to stock management. Movement of these introductions around the farm to the yards and woolshed should be planned to occur **after** other mobs to minimise the risk of disease spread to the 'home' mobs .

In the case of rams introduced for breeding, the isolation period will generally be short, and the risk of introducing disease with a small number of stud rams is generally less than with larger mobs of ewes or wethers. By sourcing rams from studs that have biosecurity plans in place and disease accreditation for Johne's disease and brucellosis

there is increased confidence that purchased animals will be healthy.

Stray sheep found on your property should be removed from the flock and isolated as a matter of urgency. Tracing ownership of strays will either allay or increase concerns regarding their potential to introduce disease or pests onto the farm. Lifting strays over a fence into a neighbouring paddock on the assumption that they have originated from that source is not good practice as it compromises your neighbour's disease status if the animals are not from that paddock. Finding the correct owner may also be the ideal opportunity to discuss boundary fencing issues.

Long disease incubation periods and germination times in the case of weeds can mean that the first signs of a disease incursion may be many years after introduction.

If disease has been introduced, vigilance will help detect the outbreak in the early stages, so that spread can be prevented and damage of the incursion minimised.

The Visitor

The entry of people, vehicles and agricultural equipment also carries a risk of disease-and weed seed introduction. A strategically placed notice, such as on the entry gate of the farm will help to ensure that all visitors check in at the house or office before having contact with stock.

Disinfection of footwear and wearing clean outer clothing should become routine practice for personnel arriving for work on the farm. These measures are particularly critical if workers have been on other farming enterprises and have had contact with other stock.

For visitors to the farm whose primary purpose is a social visit to the family home, disinfection procedures should not be necessary. The aim of security and disinfection procedures is to limit, within reason, the spread of disease to stock without socially isolating the owners. If visitors need to have contact with stock, biosecurity measures can be imposed.

Vehicles and machinery also have the potential to introduce disease or weed seeds on to a property. Vehicles and machinery coming onto the farm should be cleaned prior to arrival and then sprayed with a suitable

disinfectant. The undercarriage should be carefully inspected to ensure the complete removal of soil and weed seeds. Vehicles not required for specific operations on the farm should be left at the residence and travel undertaken in the farm vehicles.

Footrot

Footrot is a disease that must have warm and wet environmental conditions for its full expression. For this reason the organism has the ability to remain dormant in the feet of sheep for long periods, especially during dry weather conditions. Ideally, introduced sheep should be kept isolated until they have passed through a suitable footrot transmission period, usually a spring or after an early autumn break.

Sheep intended for purchase should be examined, paying particular attention to misshapen, deformed or recently pared hooves. The prior history of the sheep should be established as well as any previous foot bathings, treatments or vaccinations. If satisfied that the sheep are healthy, a footrot vendor declaration should be obtained. This legal contract protects the purchaser in the event that footrot is confirmed in the sheep within 14 days of the contract.

Sheep lice

The first signs of sheep lice may not appear for 6 months or more from the time of arrival on your premises. Recently shorn sheep carrying chemical resistant lice or sheep that were part of an unsuccessful eradication attempt, may take six months or more to show the first signs of infection. Lice numbers increase more rapidly in cold weather which is why signs of infestation may be delayed until after winter. Introduced sheep should be thoroughly checked for lice and treated with an effective chemical if evidence of infestation is found.

Ovine Johne's disease (OJD)

OJD is an incurable wasting disease that may take years after infection before the first signs of ill thrift and deaths are seen. For this reason, isolation for as long as practical, without severely disrupting stock management is advisable. Introduced sheep pose the greatest risk of introducing OJD on to a property. For this reason it is vital that proposed introductions come from flocks at low risk of OJD and preferably from MAP accredited flocks. Sheep should be accompanied by a vendor declaration.

Drench resistance

Drench resistance of internal parasites in sheep is an increasing concern especially as little research is being

carried out to develop new and more effective anthelmintics. Until recently, the avermectins were the only group free of resistance. However, their use in the future is limited by rapidly increasing resistance. Drenching sheep on arrival with an effective chemical and moving them on to an isolation area, will limit the risk of introducing drench resistant worms.

Noxious weeds

Weed seeds such as Patterson's curse, Horehound and Bathurst burr, are just a few of the common noxious weeds carried on sheep that can be spread to new areas. Their seasonal germination can mean they may only become obvious many years after introduction. Once noxious weeds enter, germinate and produce seeds, they are difficult and costly to control. Total eradication cannot be assured unless rapid detection and eradication measures take place.

The isolation area

The diseases, parasites and noxious weeds listed above are just a few of many potentially undesirable introductions. The use of a specific isolation area for new arrivals is essential. It should have adequate fencing to ensure containment of isolated sheep. Location is important to minimise contamination of other paddocks and travel to and from the woolshed and yards. In the case of Johne's disease it is preferable that the isolation area should not have downhill drainage onto other areas of the farm.

By using isolation areas and planned stock movements, it is possible to confine disease or pests to a specific area. This area can then be either cropped or grazed by non-target species until the incursion has been dealt with or a sufficient time period has elapsed to ensure that the disease agent on the soil or on pasture no longer poses a risk.

Being security conscious

The importance of having a biosecurity plan on each individual farm cannot be over emphasised. The intensively farmed pig and poultry industries have led the way in biosecurity with restricted entry and disease minimisation procedures. While disease risks may be greater in these industries, sheep producers also need to be security conscious and take all practical steps to protect their enterprise. The risks associated even with a mild incursion of a pest, plant or animal disease can be costly to the enterprise.

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