NSW GOVERNMENT Department of Primary Industries

primefact

Buying sheep - the general biosecurity duty, and how to avoid health hazards

September 2017, Primefact 1602, first edition
Animal Biosecurity and Welfare

Introducing sheep to your property

Every year graziers introduce sheep on to their properties for different reasons, for example restocking, replacement rams, short term wool-cutters or sheep for fattening. The sheep may have been bought from a range of sources including: direct from other properties, store sales, circuit sales, online sales and in some cases from fat sales.

Remember that rams from studs are also considered to be introduced sheep.

Introducing sheep to a property may be necessary on a regular basis to maintain numbers or to implement genetic improvement programs. However, each time livestock are introduced there is a risk of inadvertently introducing pests or diseases along with the stock. The benefits of introducing new sheep must be balanced against the risk of introducing problems.

The general biosecurity duty

Under section 22 of the Biosecurity Act 2015 (the Act), everyone who has a dealing with sheep, has a responsibility to ensure that, so far as is reasonably practicable, any biosecurity risk is prevented, eliminated or minimised.

The term 'dealing' is defined in section 12 of the Act and includes a very broad range of activities including having care, custody or control of sheep; buying or selling sheep - including entering into an agreement with another person to buy or sell sheep; and displaying sheep e.g. at a show. This list is not exhaustive – see the Act for the full list of 'dealings'.

From this it is clear that when sheep are offered for sale there are a number of people who potentially have dealings with the sheep. This includes the vendor, the transporter and the buyer, and could also involve an agent, saleyard manager and any others involved in the handling of the sheep and the transaction.

It is important to note that under the Act, an authorised officer under the Act does not have a dealing with livestock presented at a sale or show (as defined in section 12 of the Act). The biosecurity duty in this case rests with those who are directly involved with moving and selling the sheep.

Discharging your biosecurity duty

Under the Act, the biosecurity duty applies equally to everybody who is deemed to have a 'dealing' with the biosecurity matter (in this case – sheep) as per section 12. More than one person can have a dealing with the same stock.

In practical terms, the person offering sheep for sale must not knowingly sell sheep that are diseased, infested with a pest, or noxious weed seeds, without declaring their status to the purchaser before the sale. The use of the National Sheep Health Declaration is not mandatory for transactions of store sheep within NSW, but their use is strongly recommended. Providing a correctly completed, signed sheep health declaration is one way of discharging your biosecurity duty when selling sheep.

It is a mandatory measure under clause 15 of the Biosecurity Regulation 2017 that all sheep entering NSW must be accompanied by a completed, signed national sheep health declaration on their journey, and this must be provided to person taking delivery of the sheep. A copy must be provided to the Local Land Services Office in the region of the property where the sheep were delivered within 2 working days of their importation to NSW.

A buyer of sheep has a biosecurity duty to be familiar with the common and important pests and diseases of sheep in NSW, and be able to assess the risk they pose to their sheep enterprise. See Primefact 1527 The general biosecurity duty and sheep producers.

Buyers are strongly encouraged to carefully inspect any sheep they are considering purchasing – in person and preferably prior to agreeing to purchase them. Buyers should request national sheep health declarations for all potential sheep purchases – including rams, and assess the information provided, seeking clarification where required before buying.

It is best practice to isolate all introduced livestock on arrival and inspect them within a reasonable time to look for health or pest problems. Suspicion of a notifiable disease, for example footrot, must be notified to an authorised officer within 1 working day of being noticed as per clause 7 of the Biosecurity Regulation 2017.

Managing biosecurity risks when buying sheep

The main concerns when buying sheep are usually to prevent the introduction of

- sheep lice
- footrot
- ovine brucellosis (OB) or
- ovine Johne's disease (OJD).

However, there are other important conditions which should be considered to ensure that the sheep enterprise remains profitable. Resistant worms and noxious weed seeds are examples.

Steps must be taken not only to prevent the introduction of disease but also to avoid exposing introduced sheep to diseases that are already present on the property. This Primefact outlines some of the diseases you should consider when introducing sheep on to a property and the steps that you can take to reduce the risks associated with particular diseases.

When buying sheep from saleyards it must be remembered that the presence of authorised officers in saleyards cannot guarantee freedom from disease. The officers are there to conduct random surveillance for a range of state biosecurity programs, and they only examine a sample of the animals present at the sale.

The ideal situation is to buy sheep directly from a property where you know the disease status, treatment and vaccination history of the sheep being sold. Sheep bought at auction often have no guarantees or flock history available, although a national Sheep Health Declaration may be available on request.

National sheep health declaration

The Sheep Health Declaration (previously called the Sheep Health Statement) is an important tool that allows buyers of sheep to make informed decisions about the health status and management history of sheep they are considering for purchase or agistment on their land.

The declaration contains information about the flock and property of origin of the consigned sheep, as well as information about exposure to biosecurity risks such as; noxious weeds, footrot, lice, ovine brucellosis, ovine Johne's disease (OJD), and any preventive measures or treatments given such as; vaccinations (including Gudair®), worm and lice treatment history and any flock testing for OJD. It cannot tell the whole story on the sheep, but when completed it can give vital information and indicate what, if any further inquiries you should make before you buy.

The form is available to download free of charge, and is highly recommended for use whenever store sheep are traded within NSW. It is mandatory for all sheep entering NSW to be accompanied by a completed, signed national sheep health declaration.

Sheep lice

In New South Wales, it is estimated that approximately 20 per cent of flocks are infested with sheep lice; however, very few infested pens are detected in saleyards. This is because visual inspection of sheep can detect only medium to heavy lice infestations, and only in sheep with more than three months' wool. It is very difficult to detect light lice infestations in sheep with less than three months' wool growth, and it may take several months for a light infestation to become obvious.

Lice are small, wingless insects which feed either by biting or by sucking the sheep's skin. They hatch from their eggs in a form resembling the adult and go through a series of moults as they grow to adulthood. The sheep body louse requires near ideal conditions to survive and breed. These conditions are found on the skin near the base of the fleece. The number of lice present on an infested sheep fluctuates with the season and with the amount of wool present. The lowest number of lice are usually present in the summer as hot summers reduce the ability of lice to survive and breed.

For further information about lice see Liceboss.

Recommendations for reducing the risk of introducing lice

Obtain as much history as possible from the national sheep health declaration and the vendor, including the origin of the stock, any lice treatment given after the last shearing and, if possible whether the sheep were known to be lousy before the last treatment.

Examine the stock when they arrive at your property, looking carefully at any animal showing signs of rubbing or biting the fleece. If you need glasses to read, you will need to wear your glasses to be able to see lice on the sheep. You also need good lighting.

If the sheep are lousy, it is important to obtain details of previous treatments, to ensure that the appropriate treatment can be given. If there is no evidence of lice, keep the introduced sheep quarantined from other stock on the property for three months, and check them again before mixing with other sheep. This will allow time for a light lice infestation to become obvious.

If lice are detected in the introduced sheep, seek advice from your local veterinarian or use the Liceboss treatment tool to determine the best treatment approach. Always use chemicals according to label instructions to avoid residue problems and the development of resistance.

Footrot

It is very difficult to detect footrot in saleyard pens when the sheep are crowded together. It is even harder when environmental conditions make footrot lesions not particularly active (for example in the dry summer months).

When inspecting sheep in a paddock, remember that chronically infected sheep may not show signs of lameness or loss of condition. The footrot bacteria can persist in an infected foot for years, until the environmental conditions became suitable again for footrot expression and spread.

Footrot in sheep appears in a number of forms, ranging from a relatively mild (benign) condition through to a chronic infection with underrunning of the sole, overgrown feet and rotting tissue. Some sheep may have a chronic infection with underrunning of the soles, but have no obvious lameness. **Unfavourable environmental conditions and recent treatments will mask the disease**.

For further information see Primefact 265 Footrot in sheep and goats.

Recommendations for reducing the risk of introducing footrot

Insist on a national sheep health declaration with the footrot section completed. Ask questions of the vendor, e.g. the origin of the consignment sheep (introduced or home-bred), footrot history of his/her flock, management of introductions, and situation on neighbouring properties, etc.

If footrot is considered a potential problem inspect the sheep before you buy and view with extreme caution any mob that shows evidence of having been foot pared or foot bathed.

Be careful if buying lines of sheep with mixed earmarks or multiple PICs on the NLIS tags, which could indicate a dealer's mob or a mob from several sources. This increases the risk of buying sheep from an infected property.

Buying sheep in non-spread periods can avoid the risk of introducing sheep that are in the early stages of the disease and which may not become obvious for another two to three weeks.

Ensure that the truck to be used to move the sheep has been hosed out thoroughly with high pressure water before the sheep are loaded for their journey to your property.

If possible, keep the introduced sheep isolated from other sheep on the property until they have been through conditions suitable for the development and spread of footrot and the disease has had the opportunity to manifest itself. This limits any potential problem to one mob.

Carefully examine any lame sheep in an introduced mob as soon as they are noticed. Have them checked by a vet if you are not sure what is causing the lameness or if you suspect footrot.

Ovine brucellosis

Ovine brucellosis (OB) causes infertility and sterility in rams and can sometimes cause abortion in ewes. In the ram lumps occur in the testis, epididymides and in the accessory sex glands.

OB is not a regulated disease in NSW so official records of prevalence are not kept by the Department, but informal surveillance done by Local Land Services veterinarians indicate a prevalence of around 30% in commercial flocks in NSW. There is no treatment for OB, the only successful measure is good biosecurity to prevent it entering your flock. For more information see Primefact 472 Ovine brucellosis.

Rams at fat or store sales are usually cull rams and are very likely to be carrying OB. Do not buy rams at store sales, in saleyards or from non-accredited flocks because of the risk of introducing ovine brucellosis on to your property.

There is also a risk of introducing brucellosis on to a property through pregnant ewes that have come from an infected property. Rams can pick up brucellosis from an infected ewe at lambing time, when the ewe may excrete the organism in the birth fluids. However, there is no evidence of risk to rams that are mated with these ewes after their lambs are weaned.

Recommendations for reducing the risk of introducing ovine brucellosis

Only buy rams only from flocks that are accredited free of ovine brucellosis in their state program. There is no need to blood test rams from accredited flocks. For more information about accreditation and a list of NSW accredited flocks see the DPI OB web pages.

Do not buy rams that have had only one negative blood test. Brucellosis has a long incubation period, and two negative blood tests, at least 60 days apart, on all rams in the group, are required before a veterinarian can issue a certificate of freedom from the disease in non-accredited sheep.

Information about OB accreditation and flock testing history can be found on the national sheep health declaration.

Do not run introduced lambing ewes with rams, unless you know that the ewes have been joined to rams free of ovine brucellosis.

Always examine the genitalia of rams before purchasing.

Ovine Johne’s disease

OJD is an incurable wasting disease of sheep caused by the bacteria Mycobacterium paratuberculosis. The bacteria are shed in the dung of infected animals, and spread to other sheep through ingestion of contaminated feed or water. The disease has been detected in a number of regions in Australia, and there is a national program in place to assist producers to minimise the risk of introduction to disease free flocks and regions, and help manage the disease in areas where it is already present.

A vaccine is available that will effectively reduce the impact of the disease provided it is given to sheep before they are exposed. It is a single 1 mL dose for life, and is best given before sheep are 4 months old. OJD has a long incubation period and may not be obvious until some years after infected sheep are introduced onto a property. For more information see the national program web pages.

Recommendations to reduce the impact of ovine Johne's disease when introducing sheep

Talk to your Local Land Services veterinarian to find out the background risk of OJD in your area, and the area of origin of the sheep you are interested in purchasing. The national OJD prevalence monitoring program ceased in 2011 but the data is still useful for regional risk assessments.

Ask for a national sheep health declaration prior to purchase, and make further inquiries of the vendor if required, to be able to accurately assess the risk of OJD.

Be aware of the risk of introducing OJD, particularly if buying unvaccinated sheep from higher prevalence areas and moving them to low prevalence areas.

If buying sheep to introduce to a higher prevalence area, check their vaccination status first. If they are unvaccinated this can be done on arrival at the property to provide protection. This is especially important for sheep under 2 years of age as they are the most susceptible to infection with OJD. An exception to this is prime lambs as they will be sent to market well before signs of OJD can develop so vaccination is unnecessary.

Regularly monitor all your sheep for signs of ill-thrift, and call your veterinarian if you do start to see an unexplained 'tail' in any of your mobs.

Anthelmintic (drench) resistant worms

Anthelmintic resistance is widespread in sheep flocks in NSW and there is a risk of introducing resistant strains of parasites onto a property when sheep are brought in.

Anthelmintic resistance cannot be detected by inspecting sheep nor is there any simple test to detect resistance in sale sheep. When introducing sheep, it is advisable to assume the worst and treat them as though they are carrying resistant parasites. A quarantine drench is recommended for introduced sheep. See Primefact 477 Quarantine drenching for further details. Anthelmintic resistance testing is available from veterinary laboratories including the NSW state veterinary diagnostic laboratory.

For detailed information on all aspects of sheep worm management including managing drench resistance see the Primefact, search Wormboss or contact your local veterinarian.

Recommendations to avoid the risk of importing drench resistant worms

Before buying sheep, check the national sheep health declaration to find out if they have been on a worm control program such as WormKill or DrenchPlan, and when they received their last drench. Sometimes it may be possible to find out if there is a problem with a specific family of anthelmintic.

Drench the sheep with a highly effective combination of drenches (e.g. ML + Lev + BZ) on arrival according to body weight and hold them in the yards for at least 24 hours with access to water and hay. The practice of drenching the sheep and then letting them out into the holding paddocks around the shed and yards is not recommended. If resistant parasites are present, worm eggs that are not killed immediately by the drench will survive on these areas, and larvae can then hatch and infect sheep that are brought into the yards later.

Put the sheep on a worm control program appropriate for the property. See Wormboss to determine your worm control region and use the online tools to develop an effective plan for your sheep today.

Liver fluke

Liver fluke require watery environments to complete their life cycle, which includes a freshwater snail as an intermediate host. Infected properties are usually found in the higher rainfall regions (>600mm per year) in all states except Western Australia. See Wormboss or the NSW DPI Primefact 813 Liver Fluke – a review for detailed information.

Sheep from flukey properties can introduce the infection on to clean properties, where they can establish if local conditions are suitable. Even if local establishment of the parasite is unlikely, infected sheep can suffer serious health and production impacts if they are not treated. Consider testing sheep introduced from high risk areas so they can be managed appropriately. Several testing options are now available, so it is best to discuss the options with your veterinarian or livestock health advisor.

Recommendations to avoid introducing liver fluke

Check the national sheep health declaration for information about the origin of the stock and any previous treatments for liver fluke as drench resistance is an issue. If the stock have come from flukey areas and have not been treated recently, they should be treated with an efficient flukicide (preferably triclabendazole) to kill immature fluke as part of the quarantine drench.

Place the sheep on an appropriate fluke control program if this parasite is known to occur on your property.

Clostridial diseases – pulpy kidney, black disease etc

The clostridial diseases of sheep can occur across NSW and often strike suddenly, with dead stock often the only sign seen by the owner. Usually a veterinarian is required to determine the exact cause. See Making More from Sheep for more information on these diseases.

Clostridial diseases are preventable using vaccines known as 5 in1, 6 in1 etc. Some vaccines include protection against other diseases such as Cheesy Gland (Caseous lymphadenitis) or include a trace element supplement. Seek advice from your veterinarian on which vaccine is best for your flock.

Different production systems will have different levels of risk and may need more intensive vaccination programs to maximise protection. Higher risk is associated with lamb marking, grazing lush pasture, grain feeding, rapid growth rates, and liver fluke infection.

Introduced sheep which have not been vaccinated against clostridial disease may be susceptible to infection, particularly if they are brought from the more arid parts of the state where the risk of infection is relatively lower.

Recommendations to reduce the risk of clostridial diseases

Check the national sheep health declaration for the date of the last vaccination against the clostridial diseases. If the vaccination history is not available or is incomplete, assume that the sheep are not vaccinated.

Adopt the appropriate vaccination program for your district and production system. Seek advice from your veterinarian or livestock health advisor to determine the best program for your sheep.

Cheesy gland

Cheesy gland is a chronic bacterial disease of sheep, causing abscesses in lymph nodes and internal organs. Infection can occur in sheep with less than three to four weeks' wool. Shearing and dipping are regarded as important times when cheesy gland infection is spread**. The organism can infect undamaged skin.**

Cheesy gland not only causes losses due to trimming and condemnations at slaughter, but is believed to be a significant cause of production loss and mortality in adult sheep due to pneumonia and chronic infections. With the increasing importance of the disease to our export meat markets, producers should consider cheesy gland status when introducing sheep on to their properties. For further information see Primefact 424 Caseous lymphadenitis (cheesy gland) in sheep.

Recommendations for reducing the risk of introducing cheesy gland

Check the national sheep health declaration and buy sheep from properties that have a regular cheesy gland vaccination program.

Scabby mouth

Scabby mouth is a highly contagious viral disease of the skin of sheep and goats which usually affects lambs and kids in their first year of life. The virus survives in the environment for long periods. It can also infect humans. For this reason shearers and livestock contractors will not handle sheep with active infections.

The disease commonly causes scabs and pustules around the lips, but it can also affect the udder and the skin around the coronet and pasterns. On some properties the virus can remain dormant for many

years and outbreaks of scabby mouth only occur under certain conditions. See the Primefact for more information on the disease.

Recommendations for reducing the impact of scabby mouth

Introducing susceptible sheep onto a property that is infected with scabby mouth may cause problems. Susceptible sheep should be vaccinated on arrival, otherwise the flock should be monitored carefully when conditions make them more vulnerable to infection (for example when they are grazing in paddocks with a lot of thistle- which causes skin damage that allows virus entry). If an outbreak occurs, vaccination may help to reduce production losses.

Poisonous plants and weeds

Seeds of weeds and poisonous plants in the wool of introduced sheep may cause problems in later seasons. Some examples are Paterson's curse, St John's wort, khaki weed, thistles and Bathurst burr.

Recommendations for limiting the risk of introducing noxious weeds

Check the national sheep health declaration, which now has a section on exposure to noxious weeds.

Examine sheep on arrival and if there are high levels of contaminating seed in the wool, restrict the sheep to specific paddocks and consider targeted weed control in the future. Early shearing might be considered if the level of contamination is severe.

Sheep identification

NLIS Sheep & Goats is Australia's system for identifying and tracing sheep, lambs and farmed goats and was introduced on 1 January 2006. It uses visually readable ear tags printed with a Property Identification Code (PIC) to identify mobs of sheep and goats. Traceability is provided by the combination of ear tags, movement documents and uploads of all mob-based movements to saleyards, abattoirs and other properties to the NLIS database.

All sheep must be ear tagged before they are moved from any property to a saleyard, abattoir or another property. The tag must be printed with the PIC of the property the sheep are moving from unless the sheep are bought in sheep and have already been tagged. For further information on NLIS refer to the website at www.dpi.nsw.gov.au/animals-and-livestock/nlis/sheep-goats

Summary

Graziers should be aware of the disease risks that can accompany introduced sheep and should take appropriate preventive measures. Buyers must accept that random saleyard inspections by authorised officers cannot guarantee freedom from disease. There is a need for graziers offering healthy sheep for sale to emphasise this point by supplying national sheep health declarations.

Acknowledgments

This Primefact has incorporated content from Primefact 464 written by Dr John Plant and Dr John Seaman, both former Program Leaders for Flock Health in NSW DPI.

For updates go to www.dpi.nsw.gov.au/factsheets

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ISSN 1832 6668

PUB17/624