



## Establishing Feedlots for Sheep

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### Selecting a site

Select a well-drained, protected site that is in a convenient location close to yards, sheds, silos, and a water source. A slope of about three to four per cent will aid run-off but too much slope may encourage erosion.

Feedlot sites will become bare and dusty in summer and run-off can occur during winter, so selecting the most appropriate soil type is also important. Run-off from the feedlot could pollute dams and water courses so avoid such areas when choosing a site. Each feedlot needs to be considered on a site-specific basis but in general should be located 500 m or more from any water course. Also try to avoid areas where run-off from above the site naturally flows through the proposed feedlot area.

Trees, sheds or shelters for shade and protection are desirable but not essential. If you are planning to include trees in the feedlot it is important that they are protected from ringbarking.



*Select an area that is not prone to becoming waterlogged in wet conditions or dusty when it is bare.*

### Stocking rate

When considering stocking density it is important to find a balance between dust and mud. Allowing too much space will result in sheep walking more, raising dust and wasting energy. Dust can also lead to problems such as pinkeye and wool contamination. On the other hand, if animals are not given enough space, muddy unhygienic conditions may result. Table 1 outlines the allowances that should be made for different classes of sheep in a feedlot.

**Table 1:** Allowances for different classes of sheep in a feedlot.

Class	Space allowance (m <sup>2</sup> )
Lambs	0.5–2
Dry adults	2–5
Ewes in late pregnancy	5–10
Ewes with lambs at foot	10–15

### Mob size

Several smaller groups are easier to manage than one large mob. The largest mob should be around 500 sheep, or similar in number to the mobs that are normally run. For example, if you plan to allow 2 m<sup>2</sup> for finishing lambs and to run mobs of 500, then you would design your feedlot to be 1000 m<sup>2</sup> (20 m x 50 m or 25 m x 40 m). The mob size can then be adjusted according to the class of sheep run in the feedlot. For example, if the feedlot is 1000 m<sup>2</sup> you can run 100 ewes with lambs at foot. A series of pens can then be constructed to carry as many sheep as you think may be need to be confined at any one time. Having more than one pen allows for sheep to be separated according to class, age or growth stages.

### Feed troughs

Troughing is necessary to prevent feed wastage and animal health problems (salmonellosis, coccidiosis) and it need not be expensive. Troughs can be accessed from one or both sides and should be designed so that sheep cannot stand in them and foul the feed. Whether you choose troughs or self-feeders, it is important that the correct feed space allowance is given to avoid shy feeding.

Feed troughs are a good idea if you want to control the amount of feed animals consume, such as during a drought or for maintenance purposes. Allow 7-10 cm/ lamb or 10-15 cm/ adult of trough length (use the upper end of this allowance for sheep with wool longer than 2 cm). If animals have access to both sides of the trough then half the trough length is required. For example, if you plan to run a mob of 500 lambs and give them 10 cm of troughing each then the total length of the trough would need to be 50m. If they were able to access the trough from both sides then you would only need 25m of troughing for this mob.

### Important Disclaimer

*The Chief Executive Officer of the Department of Agriculture and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.*

If you are planning to construct your own troughs make sure that they are raised off the ground to reduce fouling. Lift the top edge up to 40–45 cm for weaners and 50–55 cm for adults. A trough width of 30 cm with a depth of 20–25 cm is ideal. This allows filling without wastage and gives enough space for a day's feed. The ground around the base of the trough may need to be hardened with gravel or concrete as the sheep will normally wear a hollow where they feed. Some of the materials that troughing can be made out of include conveyor belt matting, galvanised iron, shade cloth and commercial channelling.



*Troughs can be designed with the appropriate dimensions to satisfy the needs of sheep in feedlots.*

## **Self-feeders**

Self-feeders are a good way to reduce labour as they do away with the need for daily feeding. They are not a good option when you are trying to ration feed, such as during a drought or when you are simply trying to maintain stock. Self-feeders are more suited to the finishing of stock where maximum feed intake is required to get sheep to a marketable weight.

Less space is necessary for self-feeders. Allow 4–5 cm/lamb and 5–10 cm/adult (use the upper end of this allowance for sheep with wool longer than 2 cm). Sheep tend to arrange themselves better around circular self-feeders than rectangular self-feeders.



*Different types of self-feeders are available but are more suited to a production feeding situation where feed does not need to be rationed.*

If hay is being fed in the feedlot and is not chopped and mixed with grain, a large amount of wastage can occur. Consider wrapping the large bales in weldmesh or panelling (such as portable sheep yards) so that wastage is greatly reduced and the animals can still get to their roughage source. Hay racks can be used for large square bales. It is also important to prevent sheep from climbing on top of hay bales or rolls as it is possible for bales to collapse and sheep to be suffocated or crushed. This applies particularly to lambs in a feedlot.



*Sheep are capable of wasting large amounts of hay if it is not placed in some form of rack.*



*Simply designed hay racks can prevent large amounts of hay from being wasted.*

## **Water**

A guaranteed supply of good water is essential in a feedlot, as reduced water intake reduces feed intake and consequently hampers weight gain. Water troughs are better than dams in a feedlot as dams can become contaminated. Troughs need to be cleaned regularly, though, as contamination with faeces, dust and feed will reduce water intake. Place water troughs at the opposite end of the feedlot to hay and feed sources to prevent fouling.

The amount of water any sheep will consume depends on the weather, the type of feed, the quality of water and their physiological stage (pregnant, lactating and so on). In a feedlot situation the flow rate needs to be sufficient to keep water in the trough while the stock drink. Lot fed sheep can drink between three and six litres of water per day. Allow at least one metre of water trough for every 130 sheep.

### **Water quality**

Make sure the water is of good quality. This means that it is free from salt, algae, suspended clay and faeces. In the worst case, bad water quality can cause sheep deaths. Salt levels need to be less than 1100 mS/m for lambs, weaners and breeders and less than 2300 mS/m for wethers. For details on how to treat fouled water or to have the salt content of your water source tested contact your local Department of Agriculture.

### **Further information**

Farmnote No. 72/2000 "Sheep Health in a Feedlot"

Farmnote No. 73/2000 "Lotfeeding Prime Lambs"

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