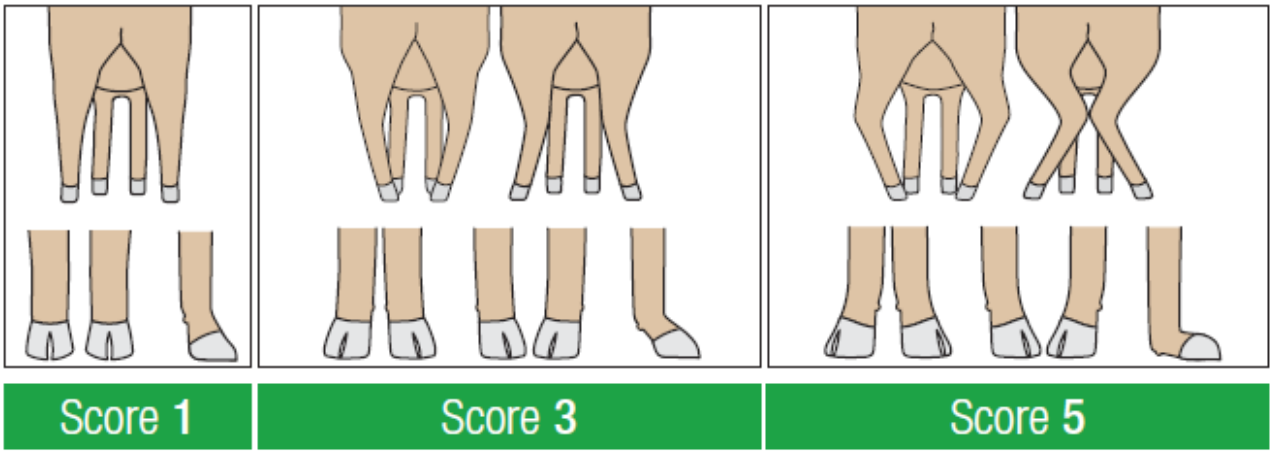
GLEN HOLME

DOHNE Solutions

FOOT STRUCTURE

In the early days of the Dohne breed in Australia, particularly 1998 to 2006, the newly imported genetics needed to be tested in the Australian environment. The first few generations from imported embryos needed close assessment for differences based on environment. Some structural weaknesses were evident and have given rise to some negative perceptions and criticisms of the Dohne Breed.

Correct foot and leg structure refers to the overall soundness of the front and back legs and the foot structure, in particular the orientation of the legs and feet and the angulation of the hocks and pasterns in relation to the feet. A visual example to assist understanding is shown below, and is an excerpt from the Visual Sheep Scores booklet produced by Australian Wool Innovation and Meat and Livestock Australia, which covers all breeds.



Score 1: Very Good: good width of stance; straight legs that stand squarely over the feet; moderate hock and pastern angulation.

Score 2: Good.

Score 3: Average: significant hock angulation, **and/or** legs and feet orientating *slightly* inwards or outwards, **and/or** *slightly* 'weak' pasterns.

Score 4: Poor.

Score 5: Very Poor: extreme angulation of hocks, **and/or** legs orientating inwards with hocks touching or 'bowed' outwards, **and/or** *very* 'weak' pasterns.

The feet and legs are extremely important structures in an animal. Although a sheep with feet/leg problems may be able to function, chances are that animal production and performance will be reduced depending on the severity of the problem. An animal with painful feet is less likely to walk and therefore may affect feeding, which will reduce the weight gain or production compared to that of an animal able to consume its full ration of feed. The impact of a ram with poor

foot/leg structure is multiplied. Firstly his reproductive performance may be affected, as he uses his hind legs during mating. The additional weight of a ram, compared with a ewe puts extra pressure on weak joints and may cause earlier breakdown of the animal and therefore require replacing. Finally, any ewe progeny left by a ram with poor foot/leg structure may be introduced, in a self replacing ewe flock scenario, thus potentially adding many more animals with weaknesses.

We consider that we were very fortunate to establish our Glen Holme Dohne Stud in 2006. By the time we bought large numbers of ewes, we purchased from Studs that were selling their best, not their worst, and we were able to access mature sheep whose soundness could be viewed. These ewes had been bred in Australia for at least two generations. Our early ewe purchases included the whole studs of Longview (Vic) in 2009, Robinada (SA) in 2012 and Jelmagh (SA) 2015. We also bought most of the top third of the Pinedale (WA) ewes in 2010.

Heavy culling where necessary of these sheep, combined with heavy classing by our assessor/classer Phillip Venning of all progeny has brought our flock to the point where it is.

Independent appraisal of our sale team in 2015 drew this comment: "Almost every ram offered has very good feet and this is a rare thing to see at a sale of this size." People come to us at Field Days, look at our sheep and say things like "I wish I could have bought sheep this good before". They check the structural soundness of feet and legs.

Good foot structure is of major economic significance.

- Animals with poor feet are at risk of painful movement, reduced willingness to seek feed and water, or even breakdown; in the case of a ram, lessening their ability to sire large numbers of lambs. Therefore income is reduced.
- Sheep with soft feet that harbour footrot also suffer reduced fertility and production. Footrot is a costly ailment to treat in both dollar and time terms.
- Rams that break down early incur unforseen and unnecessary replacement costs, thus reducing profit.