



# FACT SHEET

MARCH 2013

## MANAGING YOUR BULLS BEFORE SLAUGHTER

Different holding conditions pre-slaughter can affect bull behaviour, meat quality and carcass value. This information is based on previous research by Beef + Lamb New Zealand.

## BOOSTING PROFITS FROM BEEF

It is known that mustering, holding and transporting cattle before slaughter can be stressful for animals. Studies in the past have helped confirm that stress can have a negative effect on carcass weight, meat pH, meat colour, and can increase bruising.

Reducing stress helps ensure that the pH level in the meat remains low. High pH meat tends to be firm, dark, dry and less suitable for chilled trade.

Previous research has recommended that farmers can reduce pre-slaughter stress in cattle and improve carcass weights and value by:

- Feeding cattle while settling them in the yard before transport.
- Getting cattle used to the yard environment.
- Avoiding dehydration.

## BULLS HELD ON PASTURE THE MOST INTERACTIVE

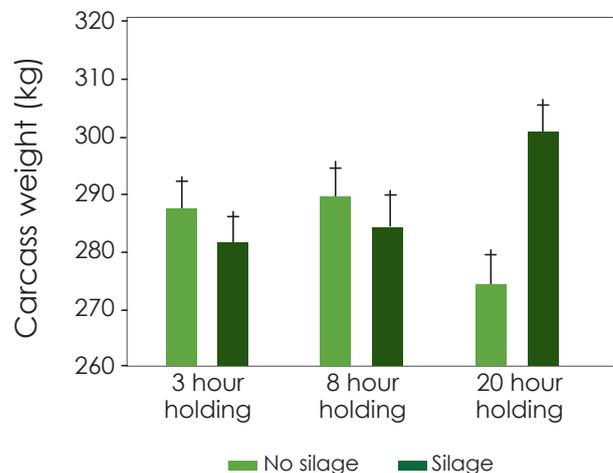
Bulls held on pasture are more aggressive and sexually active than bulls fed hay or fasted during holding time. This higher level of interaction may increase the risk of bruising. Feeding hay can increase the time spent eating, drinking and ruminating by bulls. Ruminating has a calming effect on animals, making them able to cope much better with subsequent transport.

## BENEFITS OF FEEDING BEFORE TRANSPORT

Feeding hay or silage to bulls while off pasture for 12-24 hours before cartage reduces stress compared to fasted cattle and those transported directly from pasture.

Feeding silage overnight (12 hours) before transport can give carcass weights 11 kg heavier than bulls fasted for the same length of time. Feeding silage becomes beneficial when holding bulls for more than 12 hours. However, these benefits are unlikely to occur if the bulls are unfamiliar with each other. Mixing unfamiliar bulls overnight, as well as fasting them, causes an average carcass weight loss of 6-8 kg.

Feeding silage for 20 hours before transport can result in significantly heavier carcass weights than either fasted bulls, or those fed silage for only 3 or 8 hours before transport.



**Figure 1.1** Carcass weights of 2 year old friesian bulls after holding off pasture with or without silage for 3, 8 and 20 hours before transport.

## FASTING FOR SHORTER PERIODS IS ADEQUATE

Trial results suggest fasting for up to 8 hours before transport is not detrimental to carcass weights (in comparison to transporting straight off pasture). Also, stress responses to transport can be reduced if bulls are settled in the yard for more than 4 hours before loading.

## DEHYDRATION CONTRIBUTES TO CARCASS WEIGHT LOSS

Analysis shows most bulls are at least mildly dehydrated after transport. Despite this, only a small number drink during the 4-5 hours at the abattoir. Farmers need to encourage bulls to drink as much water as possible before transport. Feeding hay or silage is advisable.

## REDUCING STRESS IN CATTLE PRIOR TO TRANSPORT

Transporting stock for longer than 8 hours causes dehydration and, for longer than 24 hours, can seriously affect welfare and productivity.

Increase the animals' familiarity with people and yards to reduce stress pre-slaughter.

- Plan unit loads of cattle well in advance to prevent mixing unfamiliar stock in the pre-slaughter period.
- Bring cattle off pasture 4 hours or more before transport so they are easier to handle.
- Minimise the length of fasting periods to less than eight hours. Alternatively, provide hay, haylage or silage to avoid weight loss, improve behaviour and encourage water drinking.
- Make sure stock are collected on time.
- Keep yards, gates and loading ramps in good order and have water available.

## THINGS TO AVOID

- Mustering cattle off pasture just before loading (they will be more stressed and become dirty during transport).
- Mustering over long distances in the week before transport and slaughter.
- Presenting horned stock for slaughter.
- Transporting unfit stock.

## MORE INFORMATION

This factsheet replaces R&D Brief 44 Managing your bulls before slaughter.

For more information on managing cattle prior to slaughter:

- Animal Welfare (sheep and beef cattle) Code of Welfare
- Guide to NZ Cattle Farming

For further information freephone Beef + Lamb New Zealand on 0800 BEEFLAMB (0800 233 352) or email [enquiries@beeflambnz.com](mailto:enquiries@beeflambnz.com) or visit [www.beeflambnz.com](http://www.beeflambnz.com)

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