Measurement of body weight or liveweight gain - cattle

Category: Teaching 2
Research 4

Objective
To measure body weight and condition or liveweight gain of cattle.

Alternatives to animal use
Video, lecture presentations

Drugs, chemicals and biological agents
Nil

Details of Procedure
1. Measurement of body weight. This is the simple measurement of the body weight of an animal.
2. Measurement of liveweight gain. Measurement of liveweight gain required the fasting of animals to minimise the variation caused by "gut-fill" from digesta.

   Fasting off feed and water for four hours before weighing is sufficient to minimise variation if animals have been on low-rougheage diets. Cattle which had been on low quality pastures may require fasting for up to 24 hours due to the much slower passage of feed particles from rumen. Any cattle fasting for 12-24 hours must have water available, although they may not drink much when off feed.

   Well-designed crush, race and weighing facilities must be used.

Animal wellbeing
Minimal if cattle are handled quietly.

Animal reuse and repeated use
Animals may be reused for teaching if quiet.
Cattle may be fasted again four days after a 12 hour fast and eight days after a 24 hour fast.

Animal care
Cattle should be handled quietly before, during and after the procedure.
Care must be taken if cattle from "bloaty" pastures or those prone to grass tetany are fasted. These cattle should be fed with palatable hay before returning to their paddock.

Pain relief
Not required.
Qualification and experience

Demonstrator: Experience in the procedure
Students: Competence in cattle handling.