



SOP 4.04 - Measurement of bodyweight or liveweight gain in cattle

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Purpose

- (1) The objective of this standard operating procedure is to provide guidance to the Charles Sturt University staff on:
 - a. To measure body weight and condition or liveweight gain of cattle.

Scope

- (2) This procedure applies to any person who is involved in AEC approved projects involving cattle.
- (3) All researchers and teaching staff using animals for scientific purposes must be competent. For definition of competency refer to Charles Sturt University's Policy on 'Animal Care Competency Training and Assessment'

Details of procedure

Weighing:

- (4) A well-designed enclosure (e.g., crush), race and weighing facilities must be used for operator safety. Operators should take care to keep body parts outside of the race and crush to avoid potential crush injuries. If cattle are reluctant to move while in the race or holding pen, low stress handling techniques should be used to encourage movement and care should be taken to prevent startling the cattle. Visual driving aids such as flags are best used to direct cattle or block movement. Hard canes, whips and dogs should be unnecessary.
- (5) Measurement of body weight, using digital scales within an enclosure (e.g., crush). The accuracy of the scales is ideally checked before weighing animals. Animals are calmly moved into the enclosed area containing the scales. Access is closed in front and behind the animal allowing it to stand calmly. A weight measurement is recorded, and the animal is released from the enclosure.
- (6) Measurement of liveweight gain. The procedure for measurement of body weight is to be followed allowing recording of weight change over periods of time. Measurement of liveweight gain requires 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 roughage 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.

Drugs, chemicals, or biological agents

- (7) N/A



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Impact of procedure on wellbeing of animals

- (8) Minimal if handled quietly. Animals which are regularly handled will be less stressed than others.

Animal care

- (9) 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

- (10) Not required.

Reuse and repeated use

- (11) Animals may be reused for teaching if quiet. Where animals have been fasted for 12 hours, they may be re-fasted for weighing after 4 days. Where animals are subjected to a 24 hour fast, they may be fasted again after 8 days.

Qualifications, experience or training necessary to perform this procedure

- (12) Demonstrators should be experienced in the procedure and competent in handling cattle.

Record requirements

- (13) N/A

Associated documentation (including pictures if available)

- (14) N/A

Glossary

- (15) N/A

References and relevant links

- (16) N/A