



AECSOP 9.26 - Ovine cumulative use measurement

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Purpose

- (1) The objective of this Standard Operating Procedure (SOP) is to outline the procedures to be used to document sheep usage. This document does not provide a detailed description of the procedures or ethical judgement on whether a procedure should be undertaken or not. This procedure relies upon the use of an appropriate point system and will allow the cumulative impact of the work undertaken by Charles Sturt University sheep to be objectively and consistently monitored. The following points apply:
 - a. Logging of sheep information relating to teaching & research to quantify welfare impacts.
 - b. Points are allocated to procedures and activities undertaken with sheep by staff and/ or students.
 - c. Points are tallied after each sheep use and a spelling period of a minimum of four weeks will commence once the maximum point tally is reached (100) or before if the Technical Officer (Ovine) deems necessary.
 - d. Lambs and weaners will have a maximum of 80 points.
 - e. The cumulative points carried by each sheep will be reported to Animal Ethics Committee (AEC) monthly.
 - f. Points will reset after each four-week spelling period and users should ensure they use sheep that are starting at zero points for projects that are predicted to reach maximum points. It should be noted that AEC approval may be obtained for sheep to go above the maximum points allowance in certain circumstances at their discretion on a case by case basis if animal or human benefits are deemed valuable.
 - g. Cumulative points will be reviewed annually, and the points allocation system will be reviewed and amended, if needed, by the Technical Officer (Ovine)

Scope

- (2) This procedure applies to all Charles Sturt University sheep, i.e., ewes, rams, hoggets, weaners and lambs.
- (3) This procedure applies to any person who is involved in maintaining the sheep flock as a part of the Animal & Field technical team.
- (4) The scope of this document is to:
 - a. provide a reference guide for animal usage within AEC requirements and *the Australian Code for the care and use of animals for scientific purposes (2013, 8th Ed)* and
 - b. ensure animal usage, and the impacts on their health and welfare, is monitored and documented.
- (5) The following items shall be considered outside the scope of this document:
 - a. detailed description of the procedures undertaken – refer to appropriate Safe Work Procedure and AEC Standard Operating Procedures (SOP)
 - b. ethical judgement on whether a procedure should be undertaken - refer to AEC application and approval process.
- (6) Records will be kept on Charles Sturt University's web-based program to tally scores accumulated. Technical staff are currently using 'Mobble', a secure password-protected animal management programme whose annual subscription fee is paid by the school of Agricultural, Environmental and Veterinary Sciences.



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Details of procedure:

Logging:

- (7) Animal & Field technical staff will log points (associated with procedures) in real time to minimise the risk of information loss. Staff are to be provided with portable equipment with internet access in order to successfully apply this procedure. All procedures sheep undergo will acquire points (Table 1).

Table 1 Points to measure cumulative impacts explained:

Point allocation	Description	Procedure examples
1	Minimal intervention <i>involves all procedures that can reasonably be expected to have no or minimal impact on sheep welfare.</i>	Moving paddocks, general handling and yard work e.g., weighing Condition & fat scoring Aging by dentition Observation by students in yards Faecal collection from yards Semen collection with artificial vagina
2	Minor intervention <i>procedures that involve interventions that can reasonably be expected to have a short-term effect on behaviour but a temporary but minimal impact on sheep welfare. These interventions are likely to include, but not be limited to, those necessary to manage the sheep and safeguard its longer-term wellbeing.</i>	Individual restraint Drenching and or vaccinating* Jetting/backline (fly protection) * Ultrasound scanning Palpation Footbath Vehicle transport Administering prescribed medication Blood collection by a competent staff member Faecal collection from rectum Clinical examination without tipping Controlled internal drug release (CIDR implant) Intra-vaginal insemination ("shot in the dark" method)
3	Mild intervention <i>procedures that involve interventions that can have a relatively long lasting (up to 24h) impact on sheep welfare. These interventions cause discomfort (physical or mental) for a period of time (up to 24h) or be acute but intense for a shorter period of time.</i>	Teasing Tipping Shearing Crutching Foot trimming Dipping Intra venous fluids Weaning – 24hr Fly strike treatment Blood collection by a supervised student Clinical examination with tipping Small group penning (<24 hours, then 3 points given for each 24 hour period after that)



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4	Moderate intervention <i>procedures that involve interventions that are invasive or involve prolonged discomfort and/or inability to move freely. Require careful management to ensure that welfare is not compromised beyond undergoing the procedure.</i>	Disbudding Lambing Speculum 'over the rail' method for AI or examination CT scan Individual penning (<24 hours, then 4 points given for each 24 hour period after that) Semen collection by electroejaculation
5	Major intervention <i>procedures that involve interventions that are invasive or involved prolonged discomfort and/or inability to move freely. Require careful clinical management to ensure that welfare is safeguarded for an extended period after following the procedure.</i>	De horning Castration Vasectomy Surgical procedures Marking (including some or all of ear tagging, vaccination, preventative treatments, castration, and tail docking) Lambing intervention Metabolic crate (<24 hours, then 5 points given for each 24 hour period after that) Laparoscopic insemination with appropriate pain relief

*This may be included in the higher-level intervention procedures

Impact of procedure on wellbeing of animals

- (8) Sheep will be excluded from classes for a period determined by technical staff when displaying behaviours that indicate aversion to the activity. Behaviours of concern may include, but are not limited to fretting, jumping, running towards barriers, open mouth breathing. Sheep will also be removed from activities due to ailments and injuries at the discretion of technical staff.
- (9) Future iterations of this SOP will seek to include evidence-based indicators of positive welfare as they emerge in the scientific literature.

Animal care

- (10) For further information on feed schedules, body condition scores and welfare contact the Manager of Animal and Field.

Qualifications, experience or training necessary to perform this procedure

- (11) Only staff that are a part of the animal and field technical team may log procedures via 'Mobbler' livestock farm management software.



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Record requirements

- (12) Records will be sent to the Charles Sturt University Animal Ethics Committee via email on the first day of the month excluding weekends in which the report will be sent the following business day.

Associated documentation (including pictures if available)

- (13) N/A

References and relevant links

- (14) Cavalieri J., Dowling B., Foyle L., Godfrey C., Lloyd J., Penny J., Tranter W., Watts S., Wearn J., & Willis G. (2023). Guidelines for the use and reuse of animals for teaching within veterinary medical education programs. *Clinical Theriogenology*, 15, 29-37.
<https://doi.org/10.58292/ct.v15.9593>
- (15) National Health and Medical Research Council. (2013). Australian code for the care and use of animals for scientific purposes, 8th edition. Canberra: National Health and Medical Research Council.