Queensland Schools Animal Ethics Committee

An independent committee formed by Department of Education, Queensland Catholic Education Commission and Independent Schools Queensland

SHEEP AND GOATS

STANDARD OPERATING PROCEDURE
Approved 15 November 2023

Approval to conduct activities under this Standard Operating Procedure (SOP) is conditional upon curriculum justification for this use of animals being documented by the activity leader and reviewed by the principal.

Schools may undertake the approved activities outlined in this SOP once authorised to do so by the Queensland Schools Animal Ethics Committee (QSAEC) Animal Ethics Officer.

TABLE OF CONTENTS

SECTION 1 | OBLIGATIONS

1.1. LEGAL OBLIGATIONS

Schools have legal obligations under the *Animal Care and Protection Act 2001* (Qld), the Animal Care and Protection Regulation 2023 (Qld), and the *Australian code for the care and use of animals for scientific purposes, 8th edition 2013 (updated 2021)* (Cwlth) (the Code), including:

1) ensuring persons in charge of an animal fulfil their duty of care to that animal
2) obtaining animal ethics approval prior to conducting scientific activities involving animals and acting in accordance with that approval once granted
3) reporting on the use of animals for scientific purposes.

Non-compliance with this legislation may result in schools receiving a maximum fine of 2000 penalty units. Penalty unit value is notified in the **Penalties and Sentences Regulation 2015 (Qld)**.

All Queenslanders have a 'general biosecurity obligation' under the *Biosecurity Act 2014* (Qld). Schools are responsible for managing biosecurity risks that are under their control and that they know about, or should reasonably be expected to know about. Contact Biosecurity Queensland on 13 25 23 for advice on managing specific risks or to report notifiable incidents.

1.2. DUTY OF CARE FOR ANIMALS

If you are in charge of an animal, you have a duty of care to that animal - no matter why you are in charge of it, what you are using it for or how long it will be in your care. All decisions and actions involving the care and use of animals for scientific purposes must be underpinned by respect for animals. This respect is demonstrated by:

- using animals only when justified
- supporting the wellbeing of the animals involved
- avoiding or minimising harm, including pain and distress, to those animals
- applying high standards of scientific integrity
- applying the principles of Replacement, Reduction and Refinement (the 3Rs, at all stages of animal care and use through:
  - **replacement** of animals with other methods (alternatives)
  - **reduction** in numbers of animals used
  - **refinement** of techniques used, in order to minimise adverse impacts on animals
- knowing and accepting one's responsibilities.

1.3. CURRICULUM JUSTIFICATION FOR THE USE OF ANIMALS IN EDUCATION

It is the teacher's responsibility to provide a curriculum justification for any learning activity that involves the use of animals, including activities approved under a SOP. The use of animals must provide an added component to the learning that is neither trivial nor available in other ways, and there must be evidence to support this position**. Planning documents must clearly identify how the use of animals is essential to achieving the learning objectives.** The justification should consider whether non-animal alternatives could achieve the same learning objectives, the minimum number of animals necessary to achieve the objectives, the impact on the animal/s involved and whether the potential effects on the wellbeing of the animals are justified by the potential benefits of their use.

The QSAEC, when undertaking a site visit at the school, may request to see documentation detailing the curriculum justification for the use of animals.

If there are viable alternatives to animal use that meet the learning objectives, they should be used in preference to using animals. At all times the impact on the animal/s should be considered and, where appropriate, discussed with the students in an age-appropriate way.

Activities outside the scope of this SOP **must be considered by QSAEC before approval can be granted**. To seek approval to conduct activities additional to those approved under this SOP or to modify an activity approved in this SOP, submit a Modification, SOP variation or amendment form in conjunction with the Application/Activity notification form at the last page of this SOP.

Please note: The QSAEC will **not** approve any activities classified as Category 4 in the Categories of animal use.

1.4. ANIMAL HEALTH AND WELFARE

Responsibilities of school personnel under the Code details obligations of staff under animal welfare legislation to promote the responsible care and use of animals for scientific purposes.

An **unexpected adverse event** is any event that may have a negative impact on the wellbeing of an animal and was not foreshadowed in the approved proposal, SOP or subsequent documents to QSAEC.

An unexpected adverse event may result from different causes, and includes but is not limited to:

- death of an animal, or group of animals, that was not expected (e.g. during surgery or anaesthesia, or after a procedure or treatment)
- adverse effects following a procedure or treatment that were not expected
- adverse effects in a larger number of animals than predicted during the planning of the project or activity, based on the number of animals actually used, not the number approved for the study
- a greater level of pain or distress than was predicted during the planning of the project or activity
- power failures, inclement weather, emergency situations or other factors external to the project or activity that have a negative impact on the welfare of the animals.

In the event of an unexpected adverse event or emergency, prompt action must be taken to address any adverse impacts on the animal/s. Alleviating unanticipated pain and distress must take precedence over an individual animal reaching the planned endpoint of the project, or the continuation or completion of the project. Emergency treatment may be required and, if necessary, animals must be humanely killed without delay.

In response to an unexpected adverse event, action and investigation by the activity leader or facility manager is required to ensure students, staff or other animals are not inadvertently affected. The specific response will depend on the animal and the circumstances. It may require seeking advice from a veterinarian to determine the best course of action (e.g. necropsy of the dead animal by the vet), removal of the deceased animal (e.g. by the supplier), or diagnostic investigations of facility or management practices to determine cause of death (e.g. water testing of fish tank, checking of ventilation).

All adverse events provide opportunities for students to learn from the experience. Activity leaders should optimise student learning outcomes (incidental and planned) by focussing on the learning potential of a specific event (e.g. prevention, animal welfare, diagnostic tools, treatment, security, harm minimisation).

Notify the QSAEC within 7 days of the event, using an Unexpected adverse event report.

Please note: Necropsy of a dead animal is not an approved activity under this SOP due to potential health and biosecurity risks and must only be performed by a competent person. QSAEC recommends that if a necropsy is required it is performed by a vet.

Further advice about reporting unexpected adverse events is available on the Department of Agriculture and Fisheries (DAF) website.

1.5. STUDENT AND STAFF HEALTH

Those involved in the care and use of animals should make themselves aware of the potential disease hazards and other associated occupational health and safety issues and manage risks according to the school's risk management process. Apart from injuries which may occur due to handling animals, there are a variety of infectious diseases (zoonoses) that are transmissible from various animals to humans.

Zoonotic diseases are common and the illnesses they cause can be serious. They can be spread by direct contact with animals, for example via bites or scratches, or through contact with animal faeces, bodily fluids, airborne particles, birth products, or enclosures contaminated with these materials.

Staff should familiarise themselves with the zoonoses the animals in their care may potentially transmit, the routes of transmission and what activities may potentially expose staff or students to infection. This research will inform the risk assessment to determine how to manage these risks or determine whether the activity should be conducted at all.

For comprehensive advice regarding zoonotic diseases and precautionary measures to minimise risks to staff and students, refer to Animal observation and handling, Animal contact guidelines - reducing the risk to human health 2014 (Interim) and Preventing zoonoses.

Risk management of animal activities ensures the health, safety and wellbeing of students, staff and others involved. If a specific Curriculum Activity Risk Assessment activity guideline exists, that guideline must be adhered to at a minimum. Risks associated with zoonotic diseases carried by animals must be identified and measures planned to allow activities to be conducted with an acceptable level of residual risk.

Any incident or injury that occurs in association with an activity must be reported, recorded and notified in accordance with Health, safety and wellbeing incident management procedure.

1.6. RECORDKEEPING

Schools must keep a school-based animal activity register which includes records relating to their use of animals for scientific purposes for seven years for audit purposes. This includes:

- scientific user registration (for non-state schools)
- signed applications, activity notification forms and modifications
- approval responses from QSAEC
- signed QSAEC reports (e.g. annual completion reporting, unexpected adverse events, complaints).

Clear and accurate records relevant to the particular species used in the activity/s should be readily available, including, as relevant:

- animal identification records (e.g. species and number of animals in each enclosure, identification of individual animals – ear tag number/National Livestock Identification System (NLIS) tag, or name)
- dates and sources of acquisition
- disposal details and dates
- feeding logs (times/amount) for each enclosure
- breeding records
- maintenance/monitoring logs for each enclosure including electrical equipment
- dates and types of husbandry practices carried out
- names, dosage, dates of any chemicals administered, and veterinary treatment provided
- emergency contacts and procedures.

SECTION 2 | QUALIFICATIONS, SKILLS AND EXPERIENCE

Any teacher conducting scientific animal activity must have competency in the particular procedure and:

- a relevant science or science education qualification (e.g. Agricultural Science, Biological Science)

  or
- relevant science or science education experience as deemed appropriate by the school principal (generally 2 years' experience).

For new or inexperienced teachers (less than two years' experience), all activities must be conducted under the supervision of a Science or Agricultural Science Head of Department (HOD) or suitably experienced person.

Where direct supervision of a suitably experienced person is not available, a new or inexperienced teacher must:

- identify a mentor, maybe a Science or Agriculture HOD from a neighbouring school
- provide planning documents to the mentor.

Persons deemed to be suitably qualified must have:

- conducted risk assessments on the procedure/s to be carried out
- found the procedure/s to be safe and humane considering animal and student welfare
- considered the maturity and suitability of the student/s involved in the activity.

Teachers should ensure that animal users, including students, staff and volunteers are provided with adequate prior instruction in specific activities to enable appropriate care of an animal and to minimise risk of undue stress or harm to an animal.

It is recommended that schools and colleges that wish to maintain a sheep enterprise restrict their choice to plain-bodied sheep, such as the dual-purpose breeds and first cross ewes. They provide wool production but are less likely to get fly strike.

3.1. PHYSICAL ATTRIBUTES OF SHEEP

Size	At the shoulder, 60-95 cm, depending on breed Small framed fine wool Merinos: 60 cm Medium framed strong wool Merinos and Suffolks: 75 cm Large framed Border Leicester: 90-95 cm
Weight	35-90 kg but can be up to 150 kg
Age at adult size	Approximately 2 years
Weight at birth	Merinos 3.6kg-4.1 kg, others 4.1kg-5.1 kg. These are only average weights and final birth weight is dependent upon the age of the ewe, the feeding regime of the ewe, the breed and whether it is a single or multiple birth.
Gestation period	147 days (range 144 to 152 days)
Number of offspring	Normally a single lamb, except for types specifically bred for reproductive performance such as the Booroola, Poll Dorset and Border Leicester/Merino cross where twins are more normal.
Weaning	2-5 months, most common 2 months
Healthy characteristics	Rectal temperature: 38.9 ˚C Heart rate: 75 beats/minute Respiration rate: 15-40 breaths/minute
Range of breeding ages	Puberty varies from 5-12 months, with breeds such as the Border Leicester/Merino cross maturing earliest and having an extended breeding season. Most ewes are mated for the first time when they are 15-18 months of age.
Senses	Hearing: Sheep have excellent hearing. They can direct their ears in the direction of a sound, and are frightened by high-pitch and loud noises such as barking dogs or fireworks. Vision: Sheep have extensive peripheral vision with a panoramic field of 191-306 degrees but have reduced ability depth perception – giving them a greater capacity to recognise and respond to predators. Sheep have excellent distance vision and good night vision, but their colour vision is not well-developed and sheep will react with fear to new colours. Smell: Sheep have an excellent sense of smell and are very sensitive to the different smells of predators. Smell helps rams locate ewes in heat and ewes locate their lambs. Sheep also use their sense of smell to locate water and determine subtle or major differences between feeds and pasture.

3.2. NATURAL BEHAVIOURS OF SHEEP (MENTAL ATTRIBUTES)

Behaviours and memory	Sheep have complex social structures. Changing and mixing herds may cause distress. Careful attention needs to be paid to the structure and stability of sheep social groups, and how staff and students interact with them. Care should be taken to ensure sheep have positive social experiences through being close together, touching, mutual grooming and opportunities for play. Sheep have impressive thinking and problem-solving abilities. For example, sheep can learn to choose correctly which of two different coloured objects contain food, and to adapt to change Sheep are capable of experiencing both positive and negative reactions to stimuli. Care should be taken to give sheep familiar environments, choice in their daily routines and the ability to explore and gradually adapt to changes. Their nervous systems are attuned to detect potential threats – such as aggressive human behaviour, and they startle easily.

3.3. PHYSICAL ATTRIBUTES OF GOATS

Size	At the withers: Dairy goats: does: 79–93 cm | bucks: 90–95 cm Angoras: does: 50–55 cm |bucks: 60–65 cm
Weight	Dairy goats: does: 55–64 kg bucks: 60–75 kg Angoras: about 45 kg
Age at adult size	1.5–2 years
Average life span	8-15 years
Weight at birth	2.5–4 kg These are only average weights and final birth weight is dependent upon the age of the doe, the breed, the specific genetics of the parents and whether it is a single or multiple birth
Gestation period	150 days on average
Number of offspring	1–3. Twins are common, triplets rare.
Weaning	Around 3-4 months
Healthy characteristics	Body temperature: 39.5 ˚C – 40.5 ˚C Heart rate: 70–90 beats/min Respiration rate: 12-30 breaths/minute
Range of breeding ages	Sexual maturity is related closely to growth rate and size. Average age for buck is 6–7 months, but 4 months is possible. Average age for does is usually 7–8 months, but 5 months is possible. Animals should not generally be bred until 15-18 months of age.
Senses	Hearing: Goats are very sensitive to a wide range of sounds, including high pitched squeals. Vision: Goats have extensive peripheral vision with a panoramic field of 320-340 degrees but have a reduced depth perception. They also have good night vision, but their colour vision is not well-developed so they will react with fear to new colours. Smell: In goats, more than in sheep, olfactory signals are important, especially in sexual and maternal behaviour.

3.4. NATURAL BEHAVIOURS OF GOATS (MENTAL ATTRIBUTES)

Behaviours and memory	Goats are very sociable, prefer to stay close together and may experience increased stress if separated. If goats have to be separated, for management purposes they should always be able to smell, see and hear other goats in their group. Goat herds have a hierarchical structure and will be affected by the introduction of new animals. A herd is usually led by a large dominant male, but leadership may be shared with an older doe during grazing. Goats move as a mob when grazing in large paddocks but will tend to disperse when mustered. Handlers should guide the mob leaders to encourage the rest to follow and only move as fast as the slowest goats. Stress can be minimised by drafting goats into uniform groups, with bucks and does separated, and consideration given to other characteristics such as weight and dominance behaviour. Goats can successfully learn tasks, and appear to learn better as an individual rather than through interactions within the herd. During situations of heightened negative or positive arousal, goats have shown lower heart rate variability, higher respiration rates, increased movement and produced more calls that were higher and louder than the norm. In positive situations, a goat's ears will be oriented backwards less often, their tail will be up more often, and they will produce calls with less varied frequencies.

3.5. SIGNS OF ILLNESS / PAIN

Stock health should be monitored daily and, preferably, more often. The first sign of ill health or pain may be a change in the sheep/goat's natural demeanour. They may be listless and lethargic. A sheep or goat that is sick or in pain may display:

- a failure to thrive or grow
- rapid breathing or hyperventilation
- lack of appetite or changed feeding habits

- facial indicators such as grinding of teeth, orbital and cheek muscle tightening, straight/concave jaw line, v-shaped nostril, ears either dropped or held in a backward position, dorsal lip-curling, changes in colour to eyes, inside of lips and gums
- repeated standing and lying down, a reluctance to rise, or rolling
- tail wagging
- unusual vocalisation
- neck extension
- kicking
- disorientation
- lethargy
- scouring
- nervousness
- discharging
- separation from or lagging behind the main body of the flock
- lameness, stiffness, immobility or abnormal gait
- ill-thrift or wasting

Common ailments that may occur include mastitis, bloat, internal parasites, footrot and flystrike in sheep and milk fever in goats.

If unable to identify and correct the cause of ill health, assistance should be sought from a veterinarian who is familiar with the breed. Any signs of illness or injury, and treatment given, must be documented in the appropriate records.

Information on the sheep pain facial expression scale can be found at https://www.ablamb.ca/images/documents/resources/welfare/SPFES-insert.pdf.

3.6. ENVIRONMENT

References: Australian animal welfare standards and guidelines for sheep, edition 1, 2016; Model code of practice for the welfare of animals – The goat, SCARM Report 32, 2003.

Sheep and goats perform well in an open pasture that has plenty of available water as well as shelter from wind, rain and sun. If housed intensively, each pen should be designed to hold no more than three to four animals and should provide an area of at least 2.25 metres² per animal, and have adequate trough space to allow all animals to feed and prevent bullying.

Goats are agile animals and should have enough space to be able to run. Kids are very playful and can be discouraged from climbing into feed bins by providing them with something else to climb on.

FENCING Sheep/goat, lambing and kidding paddocks must provide adequate protection from predators.

Fences should be 1.2 m high for goats. Ensure they are secure as some breeds of goat are prone to going under or through fences. Avoid fencing in which goats can catch their legs. Goats are particularly prone to escape attempts during periods of stress, for example when they are separated from the rest of the flock and at weaning time.

SHELTER Shelter is essential to provide shade and protection from cold, windy and wet weather.

Feed bins must be off the ground. Automatic waterers, which supply clean, fresh water at all times, must be installed and checked daily. Feed and water containers must be cleaned regularly.

If sheep and goats are to be housed for lengthy periods, wooden slatted floors, with adequate sub-floor and room ventilation, are best. For sheep this ensures that wool damage (staining), fleece rot and fly strike are minimised. For sheep in pens, care needs to be taken that the slatted floors do not cause cold, draughty conditions.

Whilst goats will seek shelter from the cold and rain, they may kid in the open on frosty nights. When kidding is imminent, goats should be confined to shelter overnight.

TEMPERATURE Newborn lambs and sheep off shears are particularly susceptible to cold, wet and windy conditions.

Goats do not like cold, wet conditions. They are more easily cold-stressed than sheep or cattle as goats have less fat under the skin. Newborn kids and Angoras, after shearing, are particularly susceptible to cold and wet.

VENTILATION Shed ventilation needs to be adequate to prevent sheds becoming humid or damp and to prevent a build-up of ammonia.

CLEANING Pens should be cleaned daily.

BEDDING Clean, dry straw or wood shavings should be provided for goat bedding. As these types of bedding need to be kept clean and dry, it is essential to inspect and replace regularly.

3.7. FOOD AND WATER REQUIREMENTS

When feeding by hand, the rule is to introduce new food types slowly and carefully. Feed plenty of high-quality roughage and feed small amounts at frequent intervals. Do not feed excessive quantities of grains. Fresh, clean water should be readily accessible. Monitoring of live weight and condition scoring will indicate the adequacy of the feed conditions.

Under circumstances of high-quality nutrition, enterotoxemia is a common nutritional disease caused by a proliferation of clostridium perfingens. For this reason, vaccination for entrotoxemia should be normal practice.

SHEEP

Sheep are most efficient, in terms of digestion, with good quality pasture comprising a balance of grasses and legumes. Care must be taken when sheep are put on pastures with high legume content as bloat can occur.

The carrying capacity of sheep on pasture is based on the average annual feed availability and is expressed in terms of Dry Sheep Equivalent/hectare (DSE rating). One DSE is the amount of feed required to maintain a 50 kg wether. A crossbred ewe with a five-week old lamb has a DSE rating of 2.9. Monitoring of live weight and condition scoring will indicate the adequacy of the feed conditions.

Type: Young lambs are suckled on ewe or milk replacer is used. For older sheep, grazing is the most economical method. Supplementary feeding with hay and concentrate mixes may be necessary. If the sheep are always grazed, a local veterinarian or the local DAF Agriculture Officer should be consulted to determine whether there is a need for specific supplementation. For more information, refer to DAF's – Supplementary feeding for sheep.

Quantity: The quantity of feed required varies with the animal's weight, stage of growth and stage of production.

Regularity: For hand feeding, provide food twice daily for young lambs and daily for other sheep.

Note: Newborn lambs must get colostrum in the first 24 hours.

Water: A clean, fresh and reliable supply is necessary. The moisture content of the available feed will determine the quantity of water required by the sheep. Sheep need between 2.5-18L of water per day and generally consume 2-3 times the amount of water to dry feed.

GOATS

Goats are considered browsing animals and, given the choice, will obtain 60% of their food from browsing. This may differ with season and availability as indicated in other works that indicates 43% of their food from browsing, 45% from grass and 12% from forbs. Goats should be protected as far as possible from foods and materials deleterious to their health (e.g. toxic plants). Goats have a narrow mouth and flexible lips which allows them to be selective grazers. Goats prefer longer pastures than sheep and will not graze as closely. Pasture species required are generally the same as for sheep, but goats will avoid many clovers. Dairy breeds require a supplement of nutritious feed, such as crushed oats, some barley or goat mixes. Good nutrition is particularly important for young, actively growing goats and for does during the last six weeks of pregnancy and when they are lactating. Ensure very young kids are not fed green grass or lucerne as it can cause bloat when the rumen is not fully developed – provide a small amount of roughage hay/chaff. Refer to

Meat and Livestock Australia's Going into Goats – Module 7 Nutrition for further information on nutrition for goats.

Type: Young kids are suckled on the doe or fed milk replacement. For older goats, grazing and browsing is the most economical. Supplementary feeding with hay and concentrate mixes may be necessary. A local veterinarian or the local DAF officer should be consulted to determine if there is a need for specific supplementation.

Quantity: The quantity of food required varies with the animal's weight, stage of growth and stage of production. If no browse is available, the carrying capacity on pasture for goats is similar to sheep. As twins and triplets are not uncommon, it is important to ensure that does, during the last third of their pregnancy, receive progressively more nutrition.

Regularity: Hay and pasture should be freely available. For dairy animals, concentrates should be fed at each milking and once per day for others. Kids can have free access to the does. If kids are hand reared, feed at the following frequencies:

- 3–4 days old: five times per day
- 3 days–3 weeks old: three to five times per day
- 3–6 weeks old: twice a day.

Essential dietary needs (variations): Newborn animals must get colostrum, or suitable substitute, as soon as possible after birth within the first 24 hours. See section 4.9 – Hand rearing of lambs and kids for more information.

Water: A clean, fresh continuous supply of water should be provided at all times. Goats require 4–5 litres/day, and more for lactating does. Water must be clean as goats may refuse to drink contaminated water. The float mechanism in troughs needs to be protected to ensure goats do not damage it.

3.8. BREEDING MANAGEMENT

In accordance with s.4.6 of the Code, animal breeding that does not achieve an educational outcome in science and fails to provide for the lifetime welfare of animals (and their offspring) cannot be demonstrated to, or carried out by, students.

SHEEP

The breeding season for sheep should be determined by seasonal rainfall probabilities, and timed for the availability of good quality feed during lambing. In Queensland there are 2 main joining periods practised autumn (March-May) or spring/summer (October-December).

A ewe's oestrus (or on heat) timing may be influenced by climatic conditions, nutrition or ewe age. The gestation period for ewes is around 21 weeks. Ewes learn mothering ability largely through experience and a significant proportion of lamb losses that occur for ewes on their first lamb can be attributed to their inexperience.

Ewes generally reach puberty when they attain a minimum body weight of about 33-35kg. The optimum age for first breeding maiden ewes is dependent on the desired outcome of the breeding program. Consideration should be given to factors such as desired wool production, number of lambs to be produced during the productive breeding life of the ewe, and/or growth rate of the ewe for higher saleable value for their meat.

Good ram management is important for the success of a breeding program. Rams that are not just healthy but also content are more likely to breed and be productive. Rams generally reach puberty between the weight range of 23-27kg with maximum reproductive capacity generally attained when a ram is 1-2 years old. The health and wellbeing of rams will directly affect their fertility and libido.

Lamb losses can be caused by many factors, which can be reduced with good management including being aware of the following:

- Keeping ewes cool for the first 9 days following fertilisation is vital as heat stress can cause embryo mortality.
- Monitoring teat and udder health of ewes as newborn lambs will rapidly lose their urge to suckle (about 6 hours after birth) if they cannot get milk due to sucking on damaged teats.
- Choosing the right time of year for breeding as cold, wet weather significantly increases lamb mortality.
- Ensuring the herd is kept healthy with sufficient shelter in the paddock.
- Keeping paddocks secure from predators.

- Preventing lambing sickness or milk fever in ewes for example by monitoring the level of nutrition in the pasture, minimising stress and providing a well-balanced diet. Seek early treatment at the first indication of sickness for the best outcomes.

For more information, refer to DAF's – Sheep breeding and genetics.

GOATS

Does are seasonal breeders with a peak oestrus (or on heat) occurring in autumn and a natural reduction in oestrus in spring. Does will cycle out of season in response to external factors such as nutrition and the presence of sexually active bucks. Body weight and condition score are important in maximising reproductive potential of breeding does.

Does generally reach puberty at about 40% of their mature live weight. The optimum age for first breeding maiden does is dependent on the outcome of the breeding program. Consideration should be given to factors such as long-term fertility of the herd and growth rate of the doe.

Bucks should be of good health and selected based on their structural conformation, genetic potential and indicators of fertility. Careful management in the lead up to breeding to minimise stress and optimise their condition is important. Bucks generally reach puberty at about 40% of their mature live weight, however deferring mating until they are more mature at around 19 months of age is recommended. Ample shade should be provided as heat stress can reduce sperm production and fertility.

The gestation period for goats is around 150 days. During this period it is important to minimise doe's stress and optimise their nutrition as this can influence the viability and productivity of the neonate.

Kid losses often occur in the first 30 days after conception due to abortion or foetal re-absorption. Managing nutrition during the joining period and minimising other potential stressors such as heat is key in minimising early reproductive losses.

For more information, refer to Meat & Livestock Australia's – Factsheet 7: Production from a breeding doe.

3.9. SUPERVISION AND MONITORING

Sheep and goats must be inspected at least once a day to assess health and wellbeing. Water, paddocks, fencing and other environmental needs of sheep and goats should also be inspected daily.

Feeding, watering and cleaning logs/schedules must be easily accessible, preferably displayed, for ease of monitoring.

Diligence in observation does not alter on weekends and holidays. Staff members need to be rostered to maintain observation schedule as per weekdays.

Daily/weekly monitoring logs must be maintained and should include monitoring of water quality, automated feeders, structures, back-up power, security, as well as animal health and behaviour.

Ongoing risk management of potential hazards (e.g. areas of entrapment, breaches of fencing, zoonotic diseases) should be rigorously applied.

Staff should ensure that appropriate records are maintained.

3.10. HANDLING

Sheep and goats need to be handled calmly and with care to prevent distress and injury to the animals and the handlers. Those kept in schools and colleges learn routines quickly and respond to food incentives.

Most sheep equipment can be used for goats. Shearing Cashmeres involves using a simple collar restraint, whilst Angoras are held in the same way as sheep. For marking, the kid is held so that its body faces the handler's body, with its head up and its back legs held. A lamb cradle can also be used for kids.

For sheep, a set of solid yards, preferably including a drafting race, simplifies handling.

Goats should be picked up by the body, never by the horns or fleece. Kids can be caught by putting hands around their bodies. Catching by the legs can cause dislocation of joints. A simple, small version of a cattle-type bail can be used for all purposes including hoof trimming, washing and milking. A simple collar can be used for milking.

Taming of goats is best done when kids are in the first few days of life. Avoid excessive stress to the mother, as some does are exceptionally protective. Taming in these cases may be easiest if the kid is hand fed.

3.11. MOVEMENT

Schools that own or keep one or more sheep or goats are required to register as a biosecurity entity with Biosecurity Queensland and will be allocated a property identification code for the property where the animal(s) are kept. Please refer to DAF's On-farm biosecurity for further information on biosecurity obligations.

There are a number of restrictions relating to the movement of sheep and goats. For information about waybills and livestock identification, please refer to DAF's Moving sheep, Moving goats and National Livestock Identification System (NLIS) websites or contact DAF directly.

3.12. TRANSPORT

The Regulation includes a compulsory code of practice for the transport of livestock at Schedule 3 (the Transport Code).

All persons involved in the transport of livestock must ensure that they are aware of and comply with their obligations under this code.

The key features of the transport code are detailed on the DAF website.

The transport code applies to the transport process from animal assembly prior to loading to unloading at the final destination. It applies to commercial and non-commercial livestock.

General requirements for transporting all livestock are mandated in the Transport code and include fitness for transport, advice of estimated time of arrival, impact of extreme weather conditions, suitability of handling facilities and vehicles, ramp alignment, livestock handling, loading density, inspection duties and record-keeping, use of prodders and dogs, and arrangements for distressed stock including killing.

Additionally, specific requirements for transporting certain animals are mandated. These include maximum journey time, spell duration and time off food and water. Requirements for sheep and goats include, but are not limited to, the following:

- Prodders must not be used on goats known or visually assessed to be pregnant.
- Sheep and goats over 15 kilograms must not be lifted or carried by one leg.
- Distressed sheep and goats may be euthanised using bleeding out or, for animals under 24 hours of age, blunt trauma.
- Maximum journey times, maximum time off water and minimum spell durations are specified:

Class of animal	Maximum hours journey time	Maximum hours off water	Minimum hours spell duration
Sheep known or visually assessed to be between 14 and 19 weeks pregnant (inclusive); Lactating sheep travelling with dependent young; Sheep less than 4 months of age; Goats known or visually assessed to be between 14 and 19 weeks pregnant (inclusive)	24	24	12
Sheep known or visually assessed to be more than 19 weeks pregnant	4	4	24
Goats known or visually assessed to be more than 19 weeks pregnant	4	4	12
Lactating goats travelling with dependent young; Goats less than 6 months of age	28	28	12
Any other sheep or goat	48	48	36

3.13. DISEASE PREVENTION

Disease control methods and internal and external parasite control programs should be developed in consultation with veterinarians or the DAF Agriculture officer. All activities should be documented using the appropriate records.

Q FEVER

Q fever is a highly infectious bacterial infection which may be acquired from sheep and goats.

Animals cannot be vaccinated against Q fever. Infected animals show no signs of illness but shed the bacteria into their environment through urine, faeces, milk and birth tissues and fluids. Pregnant and birthing animals present a high risk as birth tissues and fluids can have particularly high concentrations of Q fever bacteria.

Q fever is mainly spread by inhalation of bacteria particles from infected animal body fluids, either directly or attached to dust particles. Contaminated dust becomes airborne through dusty stockyards and prevailing winds, animal movement, dry sweeping, handling wool, hides, straw/hay and manure etc. Q fever bacteria can also become airborne directly during animal birthing, handling birth products, high pressure hosing, slaughtering animals and dressing carcasses. Less commonly, Q fever can be spread through drinking unpasteurised milk.

Humans can gain immunity to Q fever through previous exposure or vaccination. Vaccination is licenced for those aged 15 years or older.

Q fever can be a very serious disease and prevention is a priority. Higher risk activities that should be avoided by non-immune staff and students include those that expose staff and students to dust and aerosols, e.g.

- observing or assisting with animal birthing
- handling birth products
- slaughtering animals and dressing the carcass
- generating dust and aerosols when cleaning up birth products and animal excreta (e.g. dry sweeping, using a high pressure hose)
- visiting at-risk workplaces (e.g. abattoirs, tanneries).

Refer to the Q fever in the school environment fact sheet for comprehensive advice and precautionary measures to take when conducting the Approved Activities described below.

3.14. ANIMAL EMERGENCY ARRANGEMENTS

The school must have an emergency management plan to deal with events in and out of school hours. Details of the plan will vary according to the needs of each school and must include:

- signage that includes emergency contacts, animal identification details
- monitoring of animals, including on weekends and school holidays
- a first aid kit for animals
- at least one local veterinarian on call
- strategies to withdraw individual animals (e.g. due to illness or death) or all stock (e.g. due to equipment issues, leaks, natural disasters, vandalism)
- strategies for animals to be easily identified and returned to schools (e.g. due to escape, theft, or displacement in natural disasters)
- arrangements for power outages (e.g. checking on backup power, battery level checking)
- a list of who is competent to euthanase animals if necessary
- a schedule of persons authorised to respond to emergencies and engage veterinary assistance.

3.15. HUMANE KILLING AND EUTHANASIA

Where an animal has become so sick, diseased or injured that recovery is unlikely or undesirable on humane grounds, euthanasia must be arranged with a local veterinarian or a person competent in the technique for sheep and/or goats.

Notify the QSAEC of deaths and other unexpected adverse events within 7 days of the incident's occurrence, using the Unexpected adverse event report. The signed hardcopy should be held in the school's animal activity register.

3.16. DISPOSAL – FATE PLANNING

Forward planning (e.g. how and when to retire an animal from the program) will support animal welfare and wellbeing and ensure that animals used are fit to fulfil the needs of the program.

Sheep and goats can be sold privately or at auction, consigned to a registered processor/abattoir, or returned to normal husbandry conditions at the end of scientific use. Carcases must be disposed of in accordance with local council regulations. If animals are rehomed with a student, Section 3.4.1 of the Code requires a written commitment from a parent or guardian for the provision of adequate, ongoing and responsible care of the animal.

Sheep and goats that are returned to normal husbandry conditions at the end of scientific use can remain on school property and continue to be cared for by the school in accordance with current best practice. Stocking rates, facilities and assets need to be managed accordingly to ensure the animal's wellbeing is maintained.

SECTION 4 | APPROVED ACTIVITIES

All activities must be conducted in line with industry and veterinary standards. Chemicals and drugs used must be judged to be required by a qualified instructor, must be registered products, and must be used in accordance with Safety Data Sheet information and manufacturer's instructions.

Note: Instructor:student and student:animal ratios cannot always be specified with accuracy given the wide variety of class sizes, student ages and settings in which activities are being conducted. While ratios stated in this document are suggested minimum requirements, careful consideration must be given to determine ratios that are most effective in supporting and safeguarding animal wellbeing.

4.1. ADMINISTRATION OF EYE-DROPS, CREAMS, OINTMENTS, BANDAGES

Category 3 – moderate impact				
Activity	Objective	3R activities	Ratios	References
Administration of eye-drops, creams, ointments, bandaging	To instruct students in the procedures for the administration of eye-drops, creams, ointments, bandaging	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:1 supervising **Students:Animals** 30:1 observing 2:1 performing	Sheep animal welfare standards, ss. 3, 5; Goat SCARM code, ss.5.7, 6.5, 7; Animals are restrained as per 4.19 Restraint and inspection

When using medications, animal care chemicals and equipment, staff must be appropriately qualified and care must be taken to:

- read labels carefully and follow label directions
- adhere to withholding periods and check expiry dates where applicable before use
- use correct animal weight to determine correct dosage/rate
- store and dispose of chemicals/medications/bandaging being used appropriately
- use protective clothing when required
- use correct equipment for application
- document the dose, chemical/medication name, batch number, expiry date, withholding period, identity of animal(s) administered to and date of administration.

4.2. ADMINISTRATION OF INJECTIONS AND IMPLANTS

Category 3 – moderate impact				
Activity	Objective	3R activities	Ratios	References
Administration of injections and implants	To instruct students in the application of injections and implants for the control of internal and external parasites	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:1 supervising **Students:Animals** 30:1 observing 2:1 performing	Sheep animal welfare standards, ss. 3, 5; Goat SCARM code, ss.5.7, 6.5, 7; Animals are restrained as per 4.19 Restraint and inspection

Use all chemicals in accordance with the label.

It is important to maintain a program of vaccination and control of parasites for all sheep. When treating for internal and external parasites, all animals should be treated at the same time and pastures should be rotated in conjunction with the drench program. These activities need to be documented in the appropriate records.

When vaccinating sheep, ensure that the animal is adequately restrained and the needles are sharp and sterile. Subcutaneous injections are most commonly used and involve injecting the vaccine just under the skin. The recommended site for vaccination is in the loose skin folds at the base of the ear.

Sheep should be vaccinated under advice by a local veterinarian. Lambs should be vaccinated 2 weeks prior to marking or at marking and again 4-6 weeks later.

Goats need to be vaccinated with 6 in 1 vaccine. Kids should be done at marking and followed-up 4-6 weeks later. Older animals can be restrained in a bale.

To avoid abscesses and carcass damage, vaccination of goats should be done in the web of skin at the base of the ear, using 18 gauge, 12 mm needles that are sharp and sterile.

For scabby mouth, the skin is scratched with a special applicator. Note that scabby mouth vaccine is a live vaccine and is infectious to humans. Care must be taken to avoid accidental self-inoculation. If this occurs, medical assistance must be sought immediately.

4.3. APPLICATION OF POUR-ON TREATMENTS

Category 3 – moderate impact				
Activity	Objective	3R activities	Ratios	References
Application of pour on treatments	To instruct students in the application of pour-on chemicals for the control of internal and external parasites	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:1 supervising **Students:Animals** 30:1 observing 2:1 performing	Sheep animal welfare standards, ss. 3, 5.12; Goats SCARM code, ss. 6.5, 7.7; Animals are restrained as per 4.19 Restraint and inspection

Treatment for external parasites is now commonly carried out using pour-on or backline chemicals. As these chemicals are safer for the operator and for those watching the procedure, these are the preferred option for use in schools.

When using medications, animal care chemicals and equipment, staff must be appropriately qualified and care must be taken to:

- read labels carefully and follow label directions
- adhere to withholding periods and check expiry dates where applicable before use
- use correct animal weight to determine correct dosage/rate
- store and dispose of chemicals/medications/bandaging being used appropriately
- use protective clothing when required
- use correct equipment for application
- document the dose, chemical/medication name, batch number, expiry date, withholding period, identity of animal(s) administered to and date of administration.

This activity needs to be documented in appropriate records.

4.4. HANDLING AND TRAINING

Category 3 – moderate impact				
Activity	Objective	3R activities	Ratios	References
Handling and training	To instruct students in the methods of training sheep and goats to regular human handling in yard facilities; To instruct students on safe and humane methods to lead, tie up and stand in show setting	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:1 supervising **Students:Animals** 30:1 observing 2:1 performing	Code of practice about sheep (Schedule 3 of the Animal Care and Protection Regulation 2023); Sheep animal welfare standards, ss. 4, 5 Goat SCARM code, s. 6

Qualified instructors must have the safety and welfare of the animals as the principles of operation.

TRAINING LAMBS FOR COMPETITION OR SHOWING Lambs can be quietened at an early age and should be handled as much as possible. Initially, they can be trained to the halter by tying them up to a solid object. Gradually, lambs will get used to the halter and will walk on the lead. Sheep should become accustomed to being handled all over and, for rams, this includes touching the scrotum. During a show, the handler walks on the left side of the animal. When the handler is seated, the animal should face the handler and have its head at about knee height. The animal should stand with its head high and feet evenly spaced so that it is shown to its optimum. To prevent injury from the horns, horned sheep, especially rams, need to be held by the head.

TRAINING GOATS FOR COMPETITION OR SHOWING Goat kids are quietened at an early age and should be handled as much as possible. Dairy goats can be trained to walk using a collar and lead. Accustom them to being handled all over and parading around a ring.

4.5. COLLECTION OF FAECAL AND URINE SAMPLES

Category 2 – low impact				
Activity	Objective	3R activities	Ratios	References
Collection of faecal and urine samples	To instruct students in the procedures of the collection of urine and faecal samples	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:30 supervising **Students:Animals** 30:1 observing 30:1 performing	Sheep animal welfare standards, s. 5; Goat SCARM code, ss. 5, 7; Animals are restrained as per 4.19 Restraint and inspection

Before collecting samples, ensure that hands are thoroughly washed. When collecting faeces and urine samples, gloves and full face covering must be worn and hands thoroughly washed after completion of the activity.

When collecting urine, the most efficient method is to restrain the animal over a collection tray that will collect all passed urine. Remember to treat all urine as though it contains hazardous diseases. Store the urine in sealed containers, handle with surgical gloves and ensure that all collection areas are kept clean.

Faeces can be collected from the ground after the animal has defecated. Goats can be temporarily restrained in a pen or corner of the paddock.

N.B. The collection of sheep and goat excreta is a high risk activity for staff and students who are not immune to Q fever.

4.6. DIPPING AND SPRAYING

Category 3 – moderate impact				
Activity	Objective	3R activities	Ratios	References
Dipping and spraying	To demonstrate the procedures for the control of ticks and other external parasites affecting sheep and goats	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:1 supervising **Students:Animals** 30:1 observing 1:1 performing	Sheep animal welfare standards, s. 5.12; Goat SCARM code s. 7.7

Dipping and spraying activities are to be documented in appropriate records. External medications should be stored and used in strict accordance with the manufacturer's instructions and recommended methods of administration. Expiry dates and withholding periods must be strictly observed.

4.7. DRENCHING AND ORAL PREPARATIONS

Category 3 - moderate impact				
Activity	Objective	3R activities	Ratios	References
Drenching and oral preparations	To demonstrate the administration of pharmaceuticals by the oral route for internal parasite control, nutritional supplement etc.	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:1 supervising **Students:Animals** 30:1 observing 1:1 performing	Sheep animal welfare standards, s. 3; Goat SCARM code, s. 7.7

Treatment programs should be documented in the appropriate records.

Any medication which does not bear specific instructions for treatment of goats should only be used on veterinary advice.

Doses for some worm medications are much higher for goats than sheep. Veterinary advice with respect to the drugs which are effective in a particular area, and the dose rate to use for goats is essential to avoid worm resistance in an area.

When using medications, animal care chemicals and equipment, staff must be appropriately qualified and care must be taken to:

- read labels carefully and follow label directions
- adhere to withholding periods and check expiry dates where applicable before use
- use correct animal weight to determine correct dosage/rate
- store and dispose of chemicals/medications/bandaging being used appropriately
- use protective clothing when required
- use correct equipment for application
- document the dose, chemical/medication name, batch number, expiry date, withholding period, identity of animal(s) administered to and date of administration.

4.8. EAR MARKING, EAR TATTOOING AND EAR TAGGING

Category 3 – moderate impact				
Activity	Objective	3R activities	Ratios	References
Ear marking, ear tattooing and ear tagging	To demonstrate the various methods of identifying individual animals	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:2 supervising **Students:Animals** 30:1 observing 2:1 performing	Sheep animal welfare standards, ss. 5.15, 5.17; Goat SCARM code s.8; National Livestock Identification System (NLIS)

SHEEP

Ear-marking, tattooing, tagging and vaccination should be done in a way that minimises the risk of infection and with instruments that are sharp and clean. Manufacturer's instructions should be followed for husbandry procedures such as applying clips and ear tags. In horned sheep, the horn may be hot-branded provided care is taken to ensure that the branding does not predispose the animal to infection and does not burn sensitive tissue.

GOAT EAR TAGGING

Ensure that the goats are safely restrained. The procedure should be carried out quickly. Tags are placed in the left ear of females and the right ear of males. Avoid puncturing large blood vessels. Equipment should be cleaned between goats to help prevent blood-borne infections.

GOAT TATTOO APPLICATION

This procedure is necessary for registered stud goats. Clean the inner surface of an ear with methylated spirits. Apply the tattoo ink to a clean, hairless area, away from ridges of cartilage or large veins. Apply tattoo pliers firmly. Rub excess ink into tattoo marks. The pliers should be sterilised between goats to prevent the spread of blood-borne infections.

4.9. HAND REARING OF LAMBS AND KIDS

Category 2 – low impact				
Activity	Objective	3R activities	Ratios	References
Hand rearing of lambs and kids	To instruct students in the procedures for the successful hand rearing of lambs and kids	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:10 supervising **Students:Animals** 30:1 observing 1:1 performing	Sheep animal welfare standards, ss. 8.8, 8.9

Newborn animals orphaned at birth should receive colostrum or a substitute as soon as possible after birth. Warmth and shelter must be provided as newborns are particularly susceptible to the effects of weather. Any signs of ill-health should be promptly treated as newborns can become sick quickly.

When hand-rearing animals, bottles and feed mixing equipment should be thoroughly washed and sterilised after feeding. Scrub equipment thoroughly with detergent, sanitise it with a commercial sanitiser and then store the equipment in a way that prevents recontamination. As a precaution, re-sanitise equipment before use. Always make clean water available.

LAMBS

Lambs should be fed with milk at least 3-4 times a day via either bottles or self-feed teat feeders, with attention paid to fast and slow feeding lambs. Do not allow lambs to consume too much milk in a sitting as it can cause bloat. Smaller lambs may benefit from more frequent feeding. Lamb milk replacer mixed to the manufacturer's instructions is suitable for feeding. Do no use calf milk replacer.

High quality palatable feed should be offered immediately to artificial reared lambs. Gradual introduction of access to high quality pellet supplements specific to lambs is recommended. Otherwise creep feeding can commence at around 10-14 days of age. Lambs can be weaned from milk feeds when they are around 10-15kg (depending on the breed) and when they are consuming at least 200g of hard feed per day and drinking water. This is generally around 8-12 weeks of age. When weaning, milk should be gradually reduced over a few weeks before being discontinued entirely.

KIDS

Kids should be fed with 0.5-0.7L per day (in the first week) then 1 – 1.5L per day after that via bottles or self-feed teat feeders. Attention must be paid to fast and slow feeding kids. While the amount of milk may be increased each day, do not exceed 1.5L per day and do not allow kids to consume too much milk in a sitting as it can cause bloat. Goat or cow milk is suitable for kids. Powdered milk replacements should be used with caution as some may cause stomach issues.

Offer hay to pick at from the first week. Other hard feed – calf pellets, oats, barley, dairy meal or high protein horse feed – should be introduced from the third week. Gradual introduction of access to high quality pellet supplements specific to kids is recommended. Gradual weaning should only begin when kids are cudding – usually at around 7-8 weeks and weighing about 16kg. Rations should contain a minimum of 11MJ of metabolic energy and about 180g of crude protein (15-18%) per kilogram of dry matter. Diet should also

include high-quality roughage (such as chaff) to assist rumen development. For more information, refer to NSW Department of Primary Industries – Artificial methods of rearing goats.

4.10. LOADING

Category 2 – low impact				
Activity	Objective	3R activities	Ratios	References
Loading	To demonstrate the loading of sheep and/or goats in a safe and humane manner	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:16 supervising **Students:Animals** 30:1 observing 2:1 performing	Code of practice for transport of livestock (Schedule 5 of the Animal Care and Protection Regulation 2023)

The handling and loading of livestock is regulated by the Code of practice for transport of livestock.

4.11. MEASUREMENT OF GROWTH

Category 3 – moderate impact				
Activity	Objective	3R activities	Ratios	References
Measurement of growth	To instruct students to measure growth of sheep and goats	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:2 supervising **Students:Animals** 30:1 observing 2:1 performing	Animals are restrained as per 4.19 Restraint and inspection

BODY CONDITION BY VISUAL ASSESSMENT The body condition of sheep can be assessed when they are standing in a race; and for goats when they are standing in a race, bale or head stall.

GROWTH Wool growth is directly linked to feed availability and breeding. The recording of wool growth will give accurate perceptions of the effects of nutrition and breeding without causing undue stress to the animal. There is a very simple and effective method of recording wool growth. Wool growth can be ascertained by marking, with silver nitrate, the base of a small section of wool staple in the loin region of the fleece. The silver nitrate places a permanent brown line on the fleece. When the fleece is removed at shearing, growth rates can be recorded by comparing the length of the wool from shorn end to brown line compared against time. Stained wool should be removed from the clip before sale.

BODY PROPORTIONS As animals grow, the change in body proportions is best recorded through photographs or digital imagery as this means that there is little handling of stock and gives permanent and accurate records of developmental changes. It is useful to stand the sheep against a background grid.

To determine age by dentition refer to Item 4.16.

4.12. MEASUREMENT OF BODY WEIGHT

Category 2 - low impact				
Activity	Objective	3R activities	Ratios	References
Measurement of body weight	To instruct students to measure body weight of sheep and goats	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:2 supervising **Students:Animals** 30:1 observing 2:1 performing	Animals are restrained as per 4.19 Restraint and inspection

For sheep and goats, the easiest and most appropriate method to determine body weight is by using a set of portable sheep scales that can be fitted into a race. This allows the animal to be restrained and weighed without undue stress or handling. Bathroom scales can be used for lambs. The lambs are carried onto the scales and the holder's weight is subtracted.

4.13. MEASUREMENT OF BODY TEMPERATURE

Category 2 – low impact				
Activity	Objective	3R activities	Ratios	References
Measurement of body temperature	To instruct students in the measurement of the body temperature	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:2 supervising **Students:Animals** 30:1 observing 2:1 performing	Animals are restrained as per 4.19 Restraint and inspection

If the animal is mobile it must be restrained in a crush, race or by halter.

4.14. MEASUREMENT OF RESPIRATION AND PULSE RATE

Category 2 – low impact				
Activity	Objective	3R activities	Ratios	References
Measurement of respiration and pulse rate	To instruct students in the measurement of respiration and pulse rate	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:15 supervising **Students:Animals** 30:1 observing 1:1 performing	Sheep animal welfare standards, s. 5

For goats and sheep, the pulse can be recorded by feeling the carotid artery at the base of the jaw or the femoral artery inside the hind leg.

4.15. MILKING

Category 2 – low impact				
Activity	Objective	3R activities	Ratios	References
Milking	To instruct students in the procedures of milking of sheep and goats	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:10 supervising **Students:Animals** 30:1 observing 2:1 performing	Goat SCARM code, s. 7.5

When milking goats, does should be safely restrained with a collar or bail. A back leg may need to be tied using a leg rope. Before each milking, ensure adequate hygiene by washing the udder in clean water or sanitiser solution and wiping udder and teat dry with paper towel. At milking time, the milker should wash hands between goats. After collecting a sample of milk, each teat that has been milked should be dipped in a sanitiser solution registered for teat disinfection. Does may be fed while milking.

Check the udder regularly for mastitis. Severe mastitis can be checked by using a Rapid Mastitis Test which involves mixing a detergent solution with milk. Milk from infected udders will form a jelly-like consistency.

Special goat cups are available for milking machines although Jersey cow cups may be more suitable for goats with larger teats. Do not over-milk. Monitor the flow of milk and cease milking when the steady flow begins to dwindle. Lactation should only be encouraged for 5–9 months. Vacuum source should be at 35–45 kg and have a pulsation rate of 70–90 ppm.

4.16. MOUTHING/TOOTHING

Category 2 - low impact				
Activity	Objective	3R activities	Ratios	References
Mouthing/Toothing	To instruct students in the procedures for the examination of the teeth and ageing of the animal	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:15 supervising **Students:Animals** 30:1 observing 1:1 performing	Sheep animal welfare standards, s. 5; Animals are restrained as per 4.19 Restraint and inspection

To estimate the age of a sheep or goat by its dentition, check the number of teeth in its mouth. The animal can be restrained by putting it in a race or resting it on its rump.

For sheep:

- Birth to 12 months: lamb's teeth
- 12–19 months: two-tooth
- 18–24 months: four-tooth
- 23–36 months: six-tooth
- 28–48 months: eight-tooth
- Old sheep: broken mouth.

For goats:

- From birth up to 13 months: milk or kid teeth
- From 13-15 months: two-tooth
- From 18-21 months: four-tooth
- From 22-24 months: six-tooth
- From 27-32 months: eight-tooth
- Old goats: broken mouth, gummy.

4.17. MUSTERING, YARDING AND DRAFTING

Category 3 - moderate impact				
Activity	Objective	3R activities	Ratios	References
Mustering, yarding and drafting	To instruct students in the low stress handling techniques used to gather sheep and goats into yards for handling	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:5 supervising **Students:Animals** 30:1 observing 5:1 performing	Sheep animal welfare standards, s. 5; Goat SCARM code, ss. 6, 9

When mustering, yarding and handling, sheep and goats should be handled to take advantage of their natural flocking or herding behavior. People handling sheep should have an understanding of the flight zone. During mustering, animals should be rested or allowed to slow if they show signs of laboured breathing. Goats should be provided with suitable conditions and time to settle down, mother up or find shelter before further handling takes place or before the onset of darkness. Overcrowding should be avoided.

4.18. PALPATION OF TESTICLES

Category 2 – low impact				
Activity	Objective	3R activities	Ratios	References
Palpation of testicles	To instruct students in the procedures for the examination of scrotum and testicles by palpation	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:10 supervising **Students:Animals** 30:1 observing 2:1 performing	Animals are restrained as per 4.19 Restraint and inspection

Goats and sheep should be held in a standing position. The handler places a hand on each side of the base of the scrotum and feels for the spermatic chords between thumb and fingers, gradually moving down to the epididymis. Abnormalities such as hardness and swelling can be felt without too much pressure. Comparisons between the testes can be made simultaneously by using a hand on each side.

4.19. RESTRAINT AND INSPECTION

Category 2 - low impact				
Activity	Objective	3R activities	Ratios	References
Restraint and inspection	To instruct students in safe and humane restraint methods to enable procedures and close observations	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:30 supervising **Students:Animals** 30:1 observing 2:1 performing	Sheep animal welfare standards, s. 5; Goat SCARM code, ss. 6, 7.1

SHEEP

A set of sheep yards with a race can be very useful for handling sheep. There are excellent portable yards that are suitable for use in schools. Many activities can be easily carried out while the sheep are standing in a race.

Alternatively, individual sheep can be caught and restrained. To do this, a sheep can be thrown, so that it sits on its rump. This position immobilises the sheep and allows husbandry activities to be carried out.

To prevent the handler being kicked in the face by the sheep's hind legs, ensure that the sheep's head does not slip between the handler's legs. The sheep's head should lean to one side and be held down against the flank of the sheep. Normally, one of the sheep's legs is placed behind the handler's leg, giving the handler maximum control of the animal.

GOATS

Sheep yards can be used for goats although goats jump over fences more often than sheep. Avoid rushing the animals and take care when yarding goats with horns as they can injure themselves, and others, if the horns get stuck in the fences. Avoid acute corners and do not yard more than 12–15 goats at the same time.

Goats should be restrained on their feet and not thrown like sheep. Goats may be restrained by a head stall or in a bale that will allow hoof trimming, washing, milking or ageing by dentition. Angoras can be held by their horns for short periods.

Kids can be caught by putting hands around their bodies. Catching by the legs can cause dislocation of joints.

Like sheep, goats are aged according to their dentition. To check the number of teeth in its mouth, the goat can be restrained by putting it in a race, head stall or bale.

4.20. SHEEP AND GOAT GROOMING

Category 2 - low impact				
Activity	Objective	3R activities	Ratios	References
Sheep and goat grooming	To instruct in methods of preparing sheep and goats for showing by grooming, washing, combing, clipping, etc.	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:30 supervising **Students:Animals** 30:1 observing 2:1 performing	4.4 Handling and training; 4.8 Ear marking, ear tattooing and ear tagging; 4.22 Sheep and goat hoof trimming; 4.27 Disbudding, dehorning and horn trimming of goats

Grooming for shows should include tattooing, clipping, washing, brushing and trimming hooves.

For short wool breed sheep, trimming or clipping should commence at least a month before judging day. It should be done four or five times before a show. The sheep should be secured by its headstall to a rail and, ideally, raised on a table. Remove any burrs from the wool. Dampen an area, e.g. a hindquarter, with a spray bottle of water and break up the fibre with a stiff brush or carding comb. Use hand shears to trim the fibre back to a solid base. Use the bottom blade of the shears as a gauge for depth. Card up several times and clip to achieve a smooth finish. Clip the wool from the scrotum. Trim the tail to fit into the hindquarter to give a meaty appearance.

For long wool breeds, rug the sheep during the winter months with either a hessian or canvas rug. Just prior to a show, open up the wool and trim off any straggly or fluffy pieces with a pair of shears.

Retattooing should be undertaken if unclear or unreadable.

Goats should be brushed and trimmed of excess hair on the face and body with attention to blending edges on the face. Excess hair on a buck's neck should be trimmed so the shoulder and neck can be easily assessed. Tails should be trimmed neatly but not heavily.

Goats should be washed before showing, with ample time to dry.

4.21. TRANSPORT

Category 3 - moderate impact				
Activity	Objective	3R activities	Ratios	References
Transport	To demonstrate to students the appropriate procedures for transporting sheep and goats	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing **Students:Animals** 30:1 observing	Code of practice for transport of livestock (Schedule 5 of the Animal Care and Protection Regulation 2023)

Prodders must not be used on goats known or visually assessed to be pregnant. Sheep and goats over 15 kilograms must not be lifted or carried by 1 leg. Distressed sheep and goats may be euthanased using bleeding out or, for animals under 24 hours of age, blunt trauma. Maximum journey times, maximum time off water and minimum spell durations are specified.

All persons involved in the transport of livestock must ensure that they are aware of and comply with their obligations under the *Code of practice for transport of livestock*.

4.22. SHEEP AND GOAT HOOF TRIMMING

Category 3 - moderate impact				
Activity	Objective	3R activities	Ratios	References
Sheep and goat hoof trimming	To instruct in methods of hoof trimming of sheep and goats.	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:2 supervising **Students:Animals** 30:1 observing 2:1 performing	Sheep animal welfare standards, s. 5.13; Goat animal welfare standards, s. G5.25

Swelling, discharge or odour may be signs of footrot; if observed, veterinarian advice should be sought immediately. Footrot in sheep is a notifiable disease.

Hoof trimming should be performed if necessary to remove over-growth of horn and may be required every 6 weeks for optimum management. Clean all foreign material out of the hoof and, if required, trim the outer hoof wall to prevent immediate mud packing recurring.

A sheep-handling device is recommended for large numbers of animals, otherwise sheep can be handled individually. Be careful not to remove too much hoof.

If necessary, goats should be restrained by either casting with ropes or in a crush incorporating a tilting platform. Care should be taken with casting to prevent rope damage to udders or prepuce. Animals used to handling, may not need restraint. Care should be taken to prevent overtrimming.

4.23. SHEEP TAIL DOCKING

Category 3 - moderate impact				
Activity	Objective	3R activities	Ratios	References
Sheep tail docking	To instruct students in tail docking of lambs.	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1: 2 supervising **Students:Animals** 30:1 observing 2:1 performing	Code of practice about sheep (Schedule 3 of the Animal Care and Protection Regulation 2023); Sheep animal welfare standards, s. 6; 4.24 Castration of sheep

Tail docking is a recommended practice for blowfly control and must only be carried out by a skilled person or under the supervision of a skilled person. It is generally carried out with other lamb marking activities (castration, ear marking, and vaccination) and should be performed on lambs as early as management practices will allow, preferably before 12 weeks. Tail docking should only be done when necessary and in a manner that minimises the risk to the welfare of sheep, particularly pain and distress. Animals over 6 months require anaesthetic – this practice is not approved within this standard operating procedure.

Refer to Item 24, Castration of sheep, for considerations to reduce the risk of infection. Operators should seek professional advice on pain minimisation strategies that align with current best practice.

Hot knife or rubber ring methods of tail docking are recommended, except for large tails. Elastrator rings are fitted in accordance with breed and industry standards, manufacturers' instructions and the Sheep animal welfare standards. The tail should be docked at the third palpable joint and should be just long enough to cover the vulva in female sheep and be of similar length in the male.

4.24. CASTRATION OF SHEEP

Category 3 - moderate to high impact				
Activity	Objective	3R activities	Ratios	References
Sheep castration	To demonstrate the procedures for the sterilisation of male lambs in a safe and humane manner.	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:3 instructing **Students:Animals** 3:1 observing	Code of practice about sheep (Schedule 3 of the Animal Care and Protection Regulation 2023); Sheep animal welfare standards, s. 6; Animals are restrained as per 4.19 Restraint and inspection

Castration should only be done when necessary and in a manner that minimises the risk to the welfare of the sheep, particularly pain and distress, and where the procedure results in benefits to life-time sheep welfare, better flock management and a reduced health and safety risk to handlers. Lambs destined for slaughter before they are 12 weeks old, or before the onset of puberty, should not be castrated.

The operator must be skilled in the procedure, and should use the most appropriate tools and method (cutting, constriction and/or crushing) to castrate sheep.

Castration should be done after a secure maternal bond has been established, and after the lambs are 24 hours old. Castration of lambs should occur before they are 12 weeks old and preferably before six weeks. The castration of sheep older than three months should be treated as a major surgical procedure, requiring referral to a veterinarian.

Good hygiene should be practised in relation to facilities, hands, handling and instruments with disinfectant being used and changed frequently. Consideration of weather and yard conditions and fly activity should be made when planning lamb marking (castration, talk docking, ear marking) e.g. avoid muddy yards and wet or humid weather.

Risk of infection can be limited by ensuring ewes have been routinely vaccinated and that the lambs are vaccinated at lamb marking.

Lambs should be restrained in a lamb cradle and, when released, should land on their feet to avoid contact of the wound(s) with the ground. They should be separated from their mothers for the shortest possible time, prevented from overheating and allowed to settle after mustering.

Sheep must be inspected regularly following the procedure and with minimal disturbance for signs of post-operative complications during the healing process, and appropriate action taken as indicated.

Operators should seek professional advice on pain minimisation strategies that align with current best practice.

Elastrator rings are fitted in accordance with breed and industry standards, manufacturers' instructions and the Sheep animal welfare standards.

4.25. CASTRATION OF GOATS

Category 3 - moderate to high impact				
Activity	Objective	3R activities	Ratios	References
Goat castration	To demonstrate the procedures for the sterilisation of male kids in a safe and humane manner.	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:3 instructing **Students:Animals** 3:1 observing	Goats SCARM code, s. 7.3; Meat and Livestock Australia – Module 6 - Goat husbandry; Animals are restrained as per 4.19 Restraint and inspection

Castration has been identified as a painful goat husbandry procedure. Pain relief should be provided when performing any painful husbandry procedure.

When castration is required, it should be performed as early as management practices allow, preferably between ten days and six weeks, by a skilled person. Castration of animals over two months requires anaesthetic and must be conducted by a veterinarian.

Good hygiene should be practiced in relation to facilities, hands, handling and instruments with disinfectant being used and changed frequently. Consideration of weather and yard conditions should be made when planning kid marking (castration, ear marking or tagging, vaccination) e.g. choose mild days and avoid muddy or dusty yards. Castration should be conducted early in the day to allow time for mothering-up and monitoring by staff.

Methods include knife, elastic rings/bands or burdizzo.

Procedures must be carried out according to industry standards, the Goat SCARM Code and manufacturers' directions for equipment used.

Operators should seek professional advice on pain minimisation strategies that align with current best practice.

Risk of infection can be limited by ensuring does have been routinely vaccinated.

4.26. SHEARING

Category 3 - moderate impact				
Activity	Objective	3R activities	Ratios	References
Sheep shearing	To instruct students in the shearing of sheep.	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1: 2 supervising **Students:Animals** 30:1 observing 2:1 performing	Code of practice about sheep (Schedule 3 of the Animal Care and Protection Regulation 2023); Sheep animal welfare standards, ss. 5.20 – 5.23; Goat SCARM code, s.7.6; Agriculture Victoria – Code of accepted farming practice for the welfare of goats

Care should be taken when shearing and crutching to minimise cuts, and severe cuts should be treated at the first reasonable opportunity.

When harvesting wool and after shearing, consideration of the weather conditions must be made to ensure that adequate shelter is available to protect the animals from exposure to health risks. Adequate feed and water must be available for newly shorn sheep and goats.

Sheep that grow and retain long wool should be shorn annually and fleeces should not exceed 250 mm in length. Mohair goats should be shorn twice each year and cashmere goats may be shorn twice each year.

4.27. DISBUDDING, DEHORNING AND HORN TRIMMING OF GOATS

Category 3 – moderate impact				
Activity	Objective	3R activities	Ratios	References
Disbudding, dehorning and horn trimming of goats	To demonstrate the procedures for the disbudding, dehorning and horn trimming of goats in a safe and humane manner.	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing **Students:Animals** 30:1 observing	Goat SCARM code, s. 7.4

Disbudding of kids must be carried out by a skilled person as soon as the bud can be located coming through the skin. Care must be taken to ensure the entire bud is cauterised to prevent regrowth. Regrowth should be checked two to three weeks after disbudding. Care should be taken when disbudding young bucks as damage can be done to the scent glands which are located near the horn buds.

Disbudding of kids should be by heat cautery only. Disbudding by means of chemicals is not acceptable.

Trimming of hair around the bud will reduce smoke and make it easier to target and monitor disbudding. Kids should be well-restrained e.g. in a disbudding box, and a topical antiseptic applied after cauterisation.

Good hygiene should be practiced in relation to facilities, hands, handling and instruments. Gloves should be worn when using a cauterising tool. Consideration of weather and yard conditions and fly activity should be made when planning the activity e.g. avoid muddy yards and wet or humid weather.

Risk of infection can be limited by ensuring does have been routinely vaccinated and that the kids are vaccinated at this time or at kid marking.

Operators should seek professional advice on pain minimisation strategies that align with current best practice.

Dehorning (as distinct from disbudding) should only be performed by a registered veterinary practitioner.

Horn trimming or the removal of sharp horn points is recommended to minimise injury to other goats. It should be performed so as to avoid bleeding and ensure that no sharp horn projections remain after the procedure.

4.28. GPS TRACKING AND BEHAVIOURAL MONITORING SENSORS

Category 3 – moderate impact				
Activity	Objective	3R activities	Ratios	References
GPS tracking and behavioural monitoring sensors	To instruct students in the methods to apply GPS collars, ear tags or headstalls	Step-by-step guides, modelling, videos, simulations	**Instructors:Students** 1:30 instructing 1:1 supervising **Students:Animals** 30:1 observing 1:1 performing	Ear tagging as per 4.8 Ear marking, ear tattooing and ear tagging; Animals are moved as per 4.17 Mustering, yarding and drafting; Animals are restrained as per 4.19 Restraint and inspection

The deployment of Global Position Systems (GPS) and behavioural monitoring sensors – accelerometer or inertial measurement unit (IMU) – on livestock enables the collection of data for analysis by students. GPS tracking and behavioural monitoring systems are increasingly being used to improve animal production and welfare outcomes.

Schools should consider what type of sensor (GPS or accelerometer/IMU) and type of deployment (collar, ear tag or headstall) best suits the environment and animals.

GPS tracker devices log the location of the animal at a set interval, enabling mapping of livestock movements. Accelerometers record movements and can be used to monitor activity such as head movements and posture. IMUs incorporate accelerometers with a gyrometer and magnetometer, providing more detailed movement data.

Collars usually consist of a band of leather or webbing with a buckle for correct fitting and an attached enclosure which houses the sensor device. The enclosure is made of a water tight polycarbonate box which allows sensors to be deployed for long periods of time in all weather conditions. Neck collars are fitted to an animal in such a way as they are tight enough to not fall off or drag on the ground when the animal is grazing, and loose enough as to avoid being uncomfortable to the animal. Generally, if the collar is tight enough to only just prevent it being pulled over the ears of an animal it is suitable. Collars should be fitted in a race or head bail, as deemed appropriate for the animal.

Headstall deployments are useful for animals accustomed to this form of harness as light weight sensors can easily be taped to one of the straps.

Ear tags can be deployed by cutting the male component of an identification tag out and then using tag pliers, attaching a new sensor ear tag. Ear tags are typically light weight (around 20g).

SECTION 5 | GLOSSARY

3R activities	Animals used for teaching and training are not being used to discover, prove or develop new ideas and techniques but to communicate scientific concepts and to develop manual skills and expertise in specific techniques. 3R activities provide opportunities to communicate scientific concepts and develop technical skills and expertise, ensuring animals are used only when necessary and minimising the impact on animals used.
Alternatives to animal use	Replacement of animals with other methods/activities for educative purposes must be sought and used whenever possible.
Code of practice about sheep	Animal Care and Protection Regulation 2023 (Qld), Schedule 3.
DAF	Queensland Department of Agriculture and Fisheries
Goat animal welfare standards	Animal Health Australia – Animal industry welfare standards and guidelines for goats
Goat SCARM code	Model code of practice for the welfare of animals – The goat, SCARM Report 32, 2003
QSAEC	Queensland Schools Animal Ethics Committee
Sheep animal welfare standards	Animal Health Australia – Australian animal welfare standards and guidelines for sheep
Supervision	Supervision in all instances means supervision by a suitably qualified person familiar with the procedures as well as normal and abnormal animal responses.
The Code	*Australian code for the care and use of animals for scientific purposes*, 8th edition 2013 (updated 2021)
The Regulation	Animal Care and Protection Regulation 2023 (Qld)
Transport code	Code of practice for transport of livestock, Animal Care and Protection Regulation 2023 (Qld), Schedule 5.

SECTION 6 | REFERENCES

- Agriculture Victoria – code of accepted farming practice for the welfare of goats https://agriculture.vic.gov.au/livestock-and-animals/animal-welfare-victoria/pocta-act-1986/victorian-codes-of-practice-for-animal-welfare/code-of-accepted-farming-practice-for-the-welfare-of-goats
- Alberta Lamb Producers – Sheep pain facial expression scale https://www.ablamb.ca/images/documents/resources/welfare/SPFES-insert.pdf
- Animal Health Australia – Animal industry welfare standards and guidelines for goats https://www.animalwelfarestandards.net.au/goat/
- Animal Health Australia – Australian animal welfare standards and guidelines for sheep https://www.animalwelfarestandards.net.au/sheep/
- Australian and New Zealand Council for the Care of Animals in Research and Teaching https://www.adelaide.edu.au/ANZCCART/resources/
- Australian Government – Dairy goat manual – Second edition https://www.agrifutures.com.au/wp-content/uploads/publications/08-206.pdf
- Australian Veterinary Association – Pain and analgesia https://www.ava.com.au/policy-advocacy/policies/surgical-medical-and-other-veterinary-procedures-general/pain-and-analgesia/
- Department of Agriculture and Fisheries – Body condition scoring (sheep) https://www.daf.qld.gov.au/__data/assets/pdf_file/0015/53520/Animal-HD-Investigation-Condition-scores.pdf
- Department of Agriculture and Fisheries – Supplementary feeding for sheep https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/livestock/animal-welfare/sheep-health/supplementary-feeding
- Department of Agriculture and Fisheries – Sheep breeding and genetics https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/livestock/sheep-goats/breeding-genetics
- Making More from Sheep – Wean more lambs – Condition scoring http://www.makingmorefromsheep.com.au/wean-more-lambs/index.html
- Meat & Livestock Australia – Factsheet 7: Production from a breeding doe https://www.mla.com.au/globalassets/mla-corporate/extensions-training-and-tools/documents/fs07-production-from-a-breeding-doe-final.pdf
- Meat & Livestock Australia – Going into goats – Module 7 Nutrition https://www.mla.com.au/globalassets/mla-corporate/generic/extension-training-and-tools/gig-nutrition.pdf
- Model code of practice for the welfare of animals – The goat, SCARM Report 32, 2003 https://www.publish.csiro.au/book/368
- NSW Department of Primary Industries – Artificial methods of rearing goats https://www.dpi.nsw.gov.au/animals-and-livestock/goats/mgt/rearing
- Sheep Connect Tasmania – A producers guide to sheep husbandry practice https://sheepconnecttasmania.files.wordpress.com/2013/07/a-producers-guide-to-sheep-husbandry-practices.pdf

SHEEP AND GOATS STANDARD OPERATING PROCEDURE

APPLICATION/ACTIVITY NOTIFICATION FORM

SCHOOL			
ACTIVITY LEADER'S NAME			
PHONE		EMAIL	
SCHOOLING SECTOR/ SCIENTIFIC USER REGISTRATION NUMBER (ISSUED BY DAF)			
☐ STATE SCHOOL SUR000102	☐ QCEC	☐ ISQ	
ACTIVITY TITLE			
CURRICULUM JUSTIFICATION		YEAR LEVEL/S	
SPECIES OF ANIMAL/S			
NUMBER OF SHEEP		NUMBER OF GOATS	
SOURCE OF ANIMALS *Note: Written consent must be obtained from the owner for the use of privately-owned animals (if applicable), including details and duration of the owner's responsibilities.*	☐ Owned by school ☐ Privately-owned (template agreement attached) ☐ Other <specify>:		

DECLARATION BY THE ACTIVITY LEADER

I acknowledge that I am the teacher appointed/authorised teacher representative who will conduct this animal-use activity. In that capacity I agree that:

- I and all others involved are familiar, and will comply, with the *Animal Care and Protection Act 2001* (Qld), the Animal Care and Protection Regulation 2023 (Qld) and the *Australian code for the care and use of animals for scientific purposes*, 8th edition 2013 (updated 2021).
- I have read and understood Responsibilities of school personnel under the Code.
- No animal will be used in this activity except as described in this SOP and application.
- I have attached the template agreement to collect the owner's written consent for the use of privately-owned animals (if applicable) which includes the details and duration of the owner's responsibilities. I will keep a copy of the owner's signed acknowledgement of these responsibilities on our school-based animal activity register and I will advise the QSAEC of any change to the owner's responsibilities.
- Conflicts of interest have been considered and declared.
- Adequate resources will be available to undertake the project.
- Health risks and infection controls have been considered and assessed.
- All staff members and students involved in animal use activities are competent to perform the necessary tasks with care and knowledge of their ethical and legal responsibilities and the conditions imposed by the SOP.
- **Unexpected adverse events will be reported within 7 days of occurrence as per the conditions described in this SOP.**

I agree that I have considered the 3Rs of animal welfare:

- **replacement** of animals with other methods (alternatives)
- **reduction** in numbers of animals used
- **refinement** of techniques used, in order to reduce adverse impacts on animals.

ACTIVITY LEADER'S SIGNATURE		
PRINCIPAL'S NAME		☐ I have read and approved this application.
PRINCIPAL'S SIGNATURE		☐ A record of this application will be held for 7 years for audit purposes.
DATE	/ /	

All fields must be complete before lodging this form.

Email this **signed Application/Activity notification form only** to animal.ethics@qed.qld.gov.au.

Ensure that you keep a signed copy of this application on file in your school's animal register for auditing purposes.

Reset Print