Queensland Schools Animal Ethics Committee

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

PIGS AND PIG HUSBANDRY

STANDARD OPERATING PROCEDURE
Approved 19 November 2014

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

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SECTION 1 | OBLIGATIONS

Schools have legal obligations under the *Animal Care and Protection Act 2001* (Qld), the Animal Care and Protection Regulation 2012 (Qld), and the *Australian code for the care and use of animals for scientific purposes* (Cwlth) 8th Edition 2013, 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 300 PENALTY UNITS. (PENALTY UNIT VALUE IS NOTIFIED IN THE PENALTIES AND SENTENCES REGULATION 2005).

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.

PEDAGOGICAL JUSTIFICATION FOR THE USE OF ANIMALS IN EDUCATION

It is the teacher's responsibility to provide a pedagogical 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 should clearly identify how the use of animals is essential to achieving the learning objectives.** The justification should consider the impact on the animal/s involved and must balance whether the potential effects on the wellbeing of the animals are justified by the potential benefits.

The QSAEC, when undertaking a site visit at the school, may request to see documentation detailing the pedagogical 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, you will need to submit a Modification, SOP Variation or Amendment form in conjunction with the 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 for scientific purposes in Queensland schools*.

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 lead 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).

The QSAEC should be notified within 7 days of the event, using an Unexpected Adverse Event Form.

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.

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 *Handling Live Animals in a School Setting*, *Animal contact guidelines - reducing the risk to human health 2014 (Interim)* and *Preventing Zoonoses.*

Risk management of animal activities ensures the health, safety and well-being of students, staff and others involved. If a specific Curriculum Activity Risk Assessment Guideline exists, that guideline must be adhered to at a minimum. Risks associated with zoonotic diseases carried by pigs 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 and Safety Incident Recording, Notification and Management.

SECTION 2 | QUALIFICATIONS, SKILLS AND EXPERIENCE

In accordance with Schedule 2, *Code of practice about pigs*, of the *Animal Care and Protection Regulation 2012 (Qld)*(the Regulation), a person is suitably qualified to carry out pig husbandry procedures as defined in that code **only if –**

(a) the person is a veterinary surgeon; or

(b) a registered training organisation has issued the person either of the following that is relevant to carrying out the procedure—

  (i) a Certificate III in Agriculture (Pig Production) or an equivalent qualification;

  (i) a statement of attainment for achieving the units of competency required for the Rural Production Training Package for pig production or an equivalent statement of attainment; or

(c) the person has received, for a period of at least 12 months, practical training and experience in husbandry procedures at a pig establishment that, during the period, complied with an industry recognised quality assurance program or had in place an industry recognised herd health program for pigs at the establishment.

In addition to meeting these criteria, any teacher conducting scientific animal activity must have:

- 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), and
- competency in the particular procedure.

For new or inexperienced teachers (less than two years' experience), **for activities requiring performance by a competent person (rather than a suitably qualified person under the Regulation),** 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, and
- 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, and
- considered the maturity and suitability of the student/s involved in the activity.

Teachers should ensure that animal users, including students and visitors, 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.

SECTION 3 | ANIMAL INFORMATION

Schools considering establishing pigs on their school site should find out the local government requirements for keeping pigs in their particular area from their local council.
Consideration must be given to the smell and the increased incidence of flies that often accompany pig housing as this may have a negative impact on the school site and also local residents. Appropriate management and attention to detail will need to be maintained to alleviate this potential issue.
Schools must also comply with the mandatory *Code of practice about pigs*, at Schedule 2 of the Regulation.

PHYSICAL ATTRIBUTES OF PIGS

Size	Medium size farm animal up to approximately 180kg. Small varieties, such as Australian Companion Pigs, are half the size of normal pigs.
Weight	Adult: 100-300kg+ Porker: 30 – 54.5 kg dressed weight Baconer: 65 – 80 kg dressed weight Weaners: 15– 25 kg live weight Finisher: 70kg live weight Breeding sow: 120kg
Age at adult size	12-24 months (105-120kg)
Life span	Approximately 15 years
Sexual maturity	Piglets may be mated from 28 weeks, if well-developed and weighing approximately 120-130 kg liveweight.
Weight at birth	1-2kg
Gestation period	112-115 days
Breeding life	8-9 years
Number of offspring	Average litter 8-15 piglets and up to 20 piglets
Weaning	3-4 weeks
Healthy characteristics	Body temperature: 38.8˚C-39.7˚C Heart rate: 60-80 beats/minute, taken inside a hind knee or over the heart Respiration rate: 20-50 breaths/minute

ENVIRONMENT

Reference: *Model Code of Practice for the Welfare of Animals – Pigs*, 3rd Edition, PISC Report 92, 2008 (Pig PISC Code); Code of practice about pigs, Schedule 2 of the Regulation.

Activity leaders should refer to Section 4 and Appendix 3 of the Pig PISC Code for detailed information about accommodation systems, equipment, environment, protection, waste control and pigs kept outdoors.

SPACE Pigs require sufficient space to lie with limbs extended, stretch and move freely, sleep, feed, defecate and urinate. They must have a clean, dry place on which to lie. The regulation prescribes minimum space requirements for pigs by weight and other accommodation requirements such as providing protection from sunlight and severe weather. Wherever possible, a greater amount of space should be provided, with access to the outdoors and environmental enrichment.
The DAF recommends the following minimum space requirements for pigs, with an additional 30% floor space for pigs in deep litter housing.

Description	Space (m^2/pig)	Comment
Growing pigs (up to 10 kg)	0.14	Approximately 20-30% of space allowance provides for a dunging area
11-20 kg	0.22	Approximately 20-30% of space allowance provides for a dunging area
21-40 kg	0.36	Approximately 20-30% of space allowance provides for a dunging area
41-60 kg	0.47	Approximately 20-30% of space allowance provides for a dunging area
61-80 kg	0.57	Approximately 20-30% of space allowance provides for a dunging area
81-100 kg	0.66	Approximately 20-30% of space allowance provides for a dunging area
Sows (in crates) and litters	3.2	Piglets to four weeks of age
Adult sows in stalls	0.6 m x 2.2 m	New stalls
Adult boars in stalls	0.7 m x 2.4 m	New stalls
Adult pigs in groups	1.4m2 each	Minimum under the Regulation
Boars in individual pens	6.0m2	

MOVEMENT AND EXERCISE If sufficient space is provided, exercise is usually obtained through interactions such as seeking food, water and playful behaviour that is often quite physical.

TEMPERATURE Pigs, except for the very young, are able to tolerate a wide range of temperatures.
The optimal temperatures for pigs at various stages of development are:

Piglets (newborn)	27°-35°C
Piglets (three weeks of age)	24°-30°C
Farrowing house	16°-22°C
Weaners	20°-30°C (in the first week)
Growers, finishers, sows and boars	15°-30°C Temperatures over 27°C are considered undesirable, according to the DAF.

LIGHT Light (artificial or natural) is required to provide the optimal environment for growth and health. Pigs must be exposed to light for a minimum of 9 hours a day.

VENTILATION Ventilation of piggeries should be designed to let fresh air in, without causing draughts. Fresh air is necessary to prevent a build-up of poisonous gases, in particular ammonia. If the pig housing is fitted with an automatically operated-ventilation system, there must be an effective backup system that will allow the housing to be ventilated if there is a power failure. Mechanical equipment essential to provide the basic feed, water and environmental needs of pigs must be inspected daily and maintained in good working order.

SHELTER Pigs require sunlight but are susceptible to sunburn so they must have access to shade. This is an essential consideration in Queensland. Particular care needs to be taken with white breeds.
CLEANING A shovel, or a hose in well-drained piggeries, should be used to remove solid waste. Alternatively, flushing drains, which self-clean, can be installed.
BEDDING Pigs must be provided with a dry area for sleeping. Dry nesting material, such as straw or rice hulls, should be placed in a restricted area away from the dunging area.

FOOD AND WATER REQUIREMENTS

Please Note

Swill feeding (feeding food or food scraps containing animal matter) to pigs, poultry or ruminants is illegal.

TYPE Use commercial pellets to provide a suitable diet for animal type and growth stages, e.g. Pig Grower, Pig Finisher, Sow Pellets, Piglet Creep Feed.

FREQUENCY Weaners must have access to food twice daily. Once weaned, daily access is sufficient.

QUANTITY

- Average grower intake 1.1 – 1.8 kg/day
- Average finisher intake 2 – 2.8 kg/day
- Gilts Ad libitum feed intake until mating and then restricted to 2.4 kg/d during gestation, and ad libitum during lactation
- Sows 2.2- 2.3 kg during gestation and ad libitum during lactation
- Boars 2.4 kg/day

WATER Clean, adequate supplies of water, placed in cool, shaded areas in hot weather, are essential. Appendix 2 of the Pig PISC Code specifies average water consumption at different growth stages and recommended water flow rates and pressures.

If automatic nipple drinkers are used, they must always be fitted with fail-safe mechanisms and must be checked daily.

NORMAL BEHAVIOUR

Generally, pigs welcome attention and will be very interested in their visitors. Students need to be aware that excessive noise is not desirable. Students can observe normal pig behavioural patterns and compile a short list of actions observed over a designated period.

Healthy pigs are vigorous and alert. They have moist snouts, warm ears and skin that is in good condition. They have a good appetite, firm dung and breathe steadily. Grunting is common when they are disturbed. Pigs generally seek the company of other pigs as they are inquisitive by nature and playful with others. Pigs should not be kept as solitary animals, with the exception of pregnant sows, adult boars and sick animals.

Aggression problems can occur in group housing accommodation. Suggested measures to manage this can be found at section 4.1.14 of the Pig PISC Code.

SUPERVISION AND MONITORING

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

HANDLING

Please Note

Electric prodders may only be used as a last resort to protect the safety of a person transporting a pig over 60 kg.

Pigs need to be handled calmly and with care to prevent distress and injury to the animals and their handlers.

Pigs must not be led by the head. Drive the animal from behind by using an open hand to slap on the rump or flank region. Often, a straw broom or flapper used to tap the side of the neck will assist with directional change.

MOVEMENT

All landholders that have livestock including pigs on their property are required to register that property with Biosecurity Queensland.

There may be restrictions relating to the movement of pigs. For further information about recording pig movements, please refer to Moving pigs on the Queensland Government website.

TRANSPORT

The Animal Care and Protection Regulation 2012 includes a compulsory code of practice for the transport of livestock at Schedule 3.

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 pigs include, but are not limited to, the following:

- Prodders must not be used for pigs under 60 kgs weight and must be used only as a last resort to protect the safety of a person transporting a pig over that weight.
- Pigs weighing less than 15 kgs must not be lifted or carried by 1 leg.
- Euthanasia by blunt trauma is permitted for distressed piglets weighing under 15 kgs.
- Maximum journey times, maximum time off water and minimum spell durations are specified. Despite the table below, the maximum journey time for a pig, other than one known or visually assessed to be more than 14 weeks pregnant, is 72 hours with the following conditions:
    - reasonable access to water and feed is given at least once every 24 hours of the journey
    - the vehicle has sufficient space for the pig to lie down
    - the pig is spelled for at least 24 hours before starting another journey.

Class of pig	Maximum hours journey time	Maximum hours off water	Minimum hours spell duration
Pigs known or visually assessed to be more than 14 weeks pregnant	4	4	24
Lactating pigs travelling with dependent young; Weaned pigs weighing less than 30 kilograms	12	12	12
Any other pig	24	24	12

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.

SIGNS OF ILLNESS

Stock health should be monitored at least daily and preferably more often. A change in the pig's natural demeanour is often the first sign of illness. The animal may be listless or lethargic.
Closer examination may show variations in:

- gastrointestinal functions e.g. diarrhoea
- weight loss or loss of appetite
- urogenital functions, e.g. abortion, infertility or abnormal discharges
- respiratory functions e.g. persistent coughing, gasping or panting.

There may be evidence of:

- skin conditions, e.g. lesions, abnormal growths or red blotchy patches especially on the ears
- a tucked up appearance, stiff gait or abnormal posture
- excessive scratching or rubbing
- swollen joints or limping.

A failure to thrive or grow is another sign of illness.
Pigs are prone to arthritis, foot abscesses and minor wounds. Sick pigs should be separated for treatment.
If unable to identify and correct the cause of ill-health, assistance should be sought from a veterinarian who is familiar with pigs. Any signs of illness or injury, and treatments given, should be documented in the appropriate records.

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:

- monitoring of animals, including on weekends and school holidays
- a first aid kit for animals
- at least one local veterinarian on call
- a list of who is competent to euthanase animals if necessary (this is likely to be the local veterinarian but may also be an Agricultural Science HOD/TIC or Agricultural Assistant who has experience with pigs).
- a schedule of persons authorised to respond to emergencies and engage veterinary assistance.

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 pigs.

Deaths and other unexpected adverse events must be advised to QSAEC as soon as practicable after the incident's occurrence, using the Unexpected Adverse Event Report. The signed hardcopy should be held in the school's animal activity register.

DISPOSAL – FATE PLANNING

Pigs can be sold privately, at auction or consigned to an abattoir. Carcases must be disposed of in accordance with local council regulations.

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 Materials Safety Data Sheet information and manufacturer's instructions.

1. ADMINISTRATION OF TREATMENTS

Category 3 – moderate impact				
Activity	Objective	Alternatives	Ratios	References
Administration of injections and pour-on treatments	To demonstrate/instruct students in the application of pour-on chemicals as well as subcutaneous and intramuscular injections as part of general husbandry procedures	Video, learning guides or booklets are encouraged	**Instructors : Students** 1:30 instructing 1:1 supervising **Students : Animals** 30:1 observing 1:1 performing	Animal Care and Protection Regulation 2012 (Qld), Schedule 2 s. 8 Materials Safety Data Sheet/s

Administration of medicine by oral dosing, topical application to the skin or mixing with food is a prescribed non-invasive husbandry procedure under Schedule 2 of the *Animal Care and Protection Regulation 2012* (Qld) and must be conducted by a competent person or person directly supervised by a competent person.

Administration of a vaccine or other medicine to a pig by injection must be carried out by a suitably qualified person or person under the direct supervision of a suitably qualified person, as defined under Schedule 2 of *the Animal Care and Protection Regulation 2012* (Qld). See Section 2 Qualifications, page 3, for further information about the definition of 'suitably qualified'.

It is important to maintain a program of vaccination and control of all internal and external parasites for all pigs. When treating for internal and external parasites, all animals should be treated at the same time. These programs need to be documented in the appropriate records.

When using vaccines, drenches or any other animal care chemicals, care must be taken to:

- read labels carefully
- determine the weight of animals to calculate the correct dosage / rate
- adhere to withholding periods
- store chemicals/medications/bandaging appropriately
- use protective clothing when required.

Prior to the administration of treatments, including injections and pour-on treatments, ensure that each pig is adequately restrained.

For injections, ensure the needles are sharp and sterile. Choose the site for the injection and clean away loose dirt.

Once the injection is complete, remove the syringe before the plunger is released.

Iron injections, applied intramuscularly in the neck region, may be routinely carried out. Iron injections are not necessary for free-range pigs with access to soil.

Treatments for internal and external parasites, using injected drugs, are now routine. This procedure must be conducted by a suitably trained person.

Oral medications are generally associated with the control of scouring. Careful restraint is required to ensure the entire dose is swallowed. Smaller animals can be held in an upright position while larger animals need to be held with the head tilted slightly. Quick application means that prolonged restraint is unnecessary. Gravity-fed applications are most effective so tilting the animal's head helps. Treat all animals that show signs of parasite infestation and scouring. Professional recommendations may suggest treatment of the remaining animals. Non-treatment can result in long-term suffering and possibly death.

2. CAPTURE, RESTRAINT AND HANDLING

Category 3 – moderate impact				
Activity	Objective	Alternatives	Ratios	References
Capture, restraint and handling	To instruct students in the appropriate methods of capture, restraint and handling of pigs in existing yard facilities.	Video, learning guides or booklets and role playing are encouraged	**Instructors : Students** 1:30 instructing 1:1 supervising **Students : Animals** 30:1 observing 2:1 performing	Pig PISC code; Animal Care and Protection Regulation 2012 (Qld) Schedule 2 s.31 , 32; Schedule 3

Capture should be done quickly and firmly.
Pigs must not be restrained by tethering.
Pigs of different age groups require different handling methods. Piglets may be caught from behind by one or both hind legs and carried by both legs. The use of a wall or corner is advisable when handling middle-weight range animals. Older pigs are too heavy and difficult to restrain without excessive force. Pig catchers may be used in order to capture and restrain older and larger pigs.
These activities should be completed quietly and kindly. Long periods of restraint are not recommended and often lead to loud squealing. Comfortable restraint will extend the capture time. Continual training can lead to well behaved animals that know exactly where to go at the right time.
Pigs may be moved by driving. Use pig boards and sheets of metal to create a path.

3. COLLECTION OF FAECAL AND URINE SAMPLES

Category 2 - low impact				
Activity	Objective	Alternatives	Ratios	References
Non-invasive collection of faecal and urine samples	To instruct students in the procedures of collection of urine and faecal samples	Video, learning guides or booklets are encouraged	**Instructors : Students** 1:30 instructing 1:30 supervising **Students : Animals** 30:1 observing 30:1 performing	

Collection of faeces and urine will not require restraint as samples are readily available.

4. EAR MARKING AND TAGGING

Category 3 – moderate impact				
Activity	Objective	Alternatives	Ratios	References
Ear marking and tagging	To demonstrate ear tagging application or ear notching for the purpose of identifying individual animals in a herd situation	Video, learning guides or booklets and role plays using cardboard or similar material is encouraged	**Instructors : Students** 1:30 instructing 1:1 supervising **Students : Animals** 30:1 observing 1:1 performing	Pig PISC code s.5.6.17; Animal Care and Protection Regulation 2012 (Qld), Schedule 2 s. 7

Invasive husbandry procedures must be carried out by a suitably qualified person or person under the direct supervision of a suitably qualified person, as defined under Schedule 2 of the Animal Care and Protection Regulation 2012 (Qld). See Section 2 Qualifications, page 7, for further information about the definition of 'suitably qualified'.
Ears are marked or tagged to aid identification. In commercial piggeries, small V-shaped marks are notched in the ear according to the pig's age and sex.
As only a small number of animals are usually kept in schools, ear tagging is the recommended method. Most schools tend to use ear tags that are placed in the ear using a gun applicator. Pigs should be tagged after weaning with the animal restrained in a comfortable position that reduces head movement. Application is quick and simple. Ear tag pliers cause minimal stress due to the speed of the operation.

Ear notching should be avoided where possible. If ear notching is to be performed, it should be carried out before the piglets are 7 days old using special ear marking pliers, with a V-shaped cutting pattern. Ear notching pliers are available from some stock and station agents and from pig equipment specialists.
To help prevent infection, ensure all equipment is disinfected after being used with each pig. Using small pens to restrict movement is helpful. Marking often requires several cuts to be made so more physical restraint is required over a longer period. A second person must be available to restrain the pig and prevent it from moving. As the weaned pig is approximately four weeks old, it may be held in the arms against the chest.
If individual identification is not required then this activity does not need to be undertaken. Marker pens allow short-term identification but markings tend to wear off over time.

5. TATTOO APPLICATION (BRANDING)

Category 3 - moderate impact				
Activity	Objective	Alternatives	Ratios	References
Application of tattoo for branding	To demonstrate the tattoo application for the purpose of identifying individual animals in a herd situation	Video, learning guides or booklets and role plays using cardboard or similar material is encouraged	**Instructors : Students** 1:30 instructing 1:1 supervising **Students : Animals** 30:1 observing 1:1 performing	Pig PISC code s.5.6.17; Animal Care and Protection Regulation 2012 (Qld), Schedule 2 s. 7

Invasive husbandry procedures must be carried out by a suitably qualified person or person under the direct supervision of a suitably qualified person, as defined under Schedule 2 of the Animal Care and Protection Regulation 2012 (Qld). See Section 2 Qualifications, page 7, for further information about the definition of 'suitably qualified'.
Tattoo irons are purchased pre-numbered. Spike-like projections form a number in a dot-to-dot format.
Smother the number with tattoo ink and slap the tattoo iron onto the pig's rump and shoulder. The pig feels slight discomfort as effective tattooing requires reasonable force to be applied. If you are too gentle, a second attempt may be required creating unnecessary stress for the pig. Clean and sterile applicators should be used.
The activity is quick and generally does not require pigs to be restrained. Pigs can be tattooed in their normal grower pens as tattooing relies on the element of surprise. Follow the animal until the rump or shoulder is exposed, then swing the iron onto the target area. After tattooing, remove the iron, re-ink and move to the next animal. Small holding pens are ideal as there is no need to chase the animals.
All producers are required to possess, and use, a registered brand on all pigs sold for slaughter at commercial abattoirs. Branding is required for identification and trace-back of stock for disease monitoring purposes. Refer to Pigs - brand tattoos on the DAF website for further information.

6. LOADING

Category 2 – low impact				
Activity	Objective	Alternatives	Ratios	References
Loading	To demonstrate the loading of pigs in a safe and humane manner	Video, learning guides or booklets are encouraged	Instructors : Students 1:30 instructing 1:16 supervising Students : Animals 30:1 observing 2:1 performing	Code of practice for transport of livestock (Schedule 3 of the Animal Care and Protection Regulation 2012)

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

7. BODY WEIGHT, CONDITION, GROWTH AND PROPORTIONS

Category 2 - low impact				
Activity	Objective	Alternatives	Ratios	References
Measurement of body weight, condition, growth and proportions	To instruct students to measure body weight, condition and growth proportions	Video, learning guides or booklets are encouraged	**Instructors : Students** 1:30 instructing 1:5 supervising **Students : Animals** 30:1 observing 5:1 performing	Animals are moved and restrained as per Item 2; Animal Care and Protection Regulation 2012 (Qld), Schedule 2 s.5

To assist the movement of stock, handling recommendations should be observed. Only animals that are accustomed to handling should be used. The physical measurement of body weight should take a short period of time so that stress levels are reduced.

Measurement of a pig's back fat in a way that does not penetrate its skin is a prescribed non-invasive husbandry procedure under the Code of practice about pigs, Schedule 2 of the Animal Care and Protection Regulation 2012 (Qld) and can be carried out by a competent person or under the direct supervision of a competent person.

Ultrasound back fat testers are now routinely used in piggeries.

To gain accurate measurements, it is recommended that at least four animals are monitored. If a greater number is present in the litter or group, include all available animals in your measurements.

8. MEASUREMENT OF PULSE RATE, RESPIRATION AND SKIN TEMPERATURE

Category 2 – low impact				
Activity	Objective	Alternatives	Ratios	References
Measurement of respiration and pulse rate	To instruct students in the measurement of pulse rate, respiration and skin temperature	Video, learning guides or booklets are encouraged	**Instructors : Students** 1:30 instructing 1:1 supervising **Students : Animals** 30:1 observing 2:1 performing	Animal Care and Protection Regulation 2012 (Qld), Schedule 2 s.6, 7

This activity must be carried out by a suitably qualified person or person under the direct supervision of a suitably qualified person, as defined under Schedule 2 of the Animal Care and Protection Regulation 2012 (Qld). See Section 2 Qualifications, page 7, for further information about the definition of 'suitably qualified'.

Quick and accurate measurements can be obtained by confining a pig in a small area. Animals that are accustomed to handling should be used. A single animal will suffice; however, a second pig allows comparisons to be made and improves the accuracy of results.

9. MILK COLLECTION

Category 2 – low impact				
Activity	Objective	Alternatives	Ratios	References
Collection of milk	To instruct students in the collection of milk (colostrum)	Video, learning guides or booklets are encouraged	**Instructors : Students** 1:30 instructing 1:1 supervising **Students : Animals** 30:1 observing 2:1 performing	Animal Care and Protection Regulation 2012 (Qld), Schedule 2 s. 7 Animals are moved and restrained as per Item 2

This activity must be carried out by a suitably qualified person or person under the direct supervision of a suitably qualified person, as defined under Schedule 2 of the Animal Care and Protection Regulation 2012 (Qld). See Section 2 Qualifications, page 7, for further information about the definition of 'suitably qualified'.

Collection of milk may require the pig to be restrained using a farrowing crate. Only pigs that are accustomed to handling should be used. Milk is usually collected so that frozen colostrum can be stored for orphan piglets. A single animal is adequate; however, in order to obtain enough samples of colostrum, several animals, in a variety of physiological states, may be required. Artificial colostrum products can be purchased commercially.

10. COLLECTION OF SALIVA

Category 2 - low impact				
Activity	Objective	Alternatives	Ratios	References
Collection of saliva samples	To instruct students in the procedures of collection of saliva samples	Video, learning guides or booklets are encouraged	**Instructors : Students** 1:30 instructing 1:1 supervising **Students : Animals** 30:1 observing 1:1 performing	Animals are moved and restrained as per Item 2

This activity must be carried out by a suitably qualified person or person under the direct supervision of a suitably qualified person, as defined under Schedule 2 of the Animal Care and Protection Regulation 2012 (Qld). See Section 2 Qualifications, page 7, for further information about the definition of 'suitably qualified'.

Collection of saliva may require the pig to be restrained using a farrowing crate. Only pigs that are accustomed to handling should be used.

11. TRANSPORT

Category 3 - moderate impact				
Activity	Objective	Alternatives	Ratios	References
Transport	To demonstrate to students the appropriate procedures for transporting pigs	Video, learning guides or booklets are encouraged	**Instructors : Students** 1:30 instructing **Students : Animals** 30:1 observing	Code of practice for transport of livestock (Schedule 3 of the Animal Care and Protection Regulation 2012)

Prodders must not be used for pigs under 60 kgs weight and must be used only as a last resort to protect the safety of a person transporting a pig over that weight. Pigs weighing less than 15 kgs must not be lifted or carried by 1 leg. Euthanasia by blunt trauma (by a suitably qualified person or a person acting under the direct supervision of a suitably qualified person) is permitted for distressed piglets weighing less than 15 kgs.

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.*

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 pigs	*Animal Care and Protection Regulation 2012*, Schedule 2
DAF	Queensland Department of Agriculture and Fisheries
Pig PISC code	*Model Code of Practice for the Welfare of Animals – Pigs*, 3rd Edition, PISC Report 92, 2008 Code of practice about pigs, Schedule 2 of the Regulation
QSAEC	Queensland Schools Animal Ethics Committee
Ratios	Instructor/student and student/animal ratios stated in this document are minimum requirements.
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
The Regulation	*Animal Care and Protection Regulation 2012*
Transport code	Code of practice for transport of livestock, *Animal Care and Protection Regulation 2012*, Schedule 3.

ACTIVITY NOTIFICATION FORM

SCHOOL NAME			
ACTIVITY LEADER'S NAME			
ACTIVITY LEADER QUALIFICATIONS	Tick whichever is appropriate to qualify you as 'suitably qualified' to carry out pig husbandry procedures under the *Code of practice about pigs (*Refer Section 2: Qualifications, skills and experience) ☐ I am a veterinary surgeon. ☐ A registered training organisation has issued me the appropriate qualification or equivalent. ☐ I have at least 12 months practical training and experience at a pig establishment that complied with an industry recognised quality assurance program or had in place an industry recognised herd health program for pigs at the establishment.		
PHONE		EMAIL	
SCHOOLING SECTOR/ SCIENTIFIC USER REGISTRATION NUMBER (ISSUED BY DAF)			
☐ STATE SCHOOL 102	☐ QCEC	☐ ISQ	
ACTIVITY TITLE			
SUBJECT AREA/S		YEAR LEVEL/S	
SPECIES OF ANIMAL/S		NUMBER OF ANIMALS	

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 2012* (Qld) and the *Australian code for the care and use of animals for scientific purposes*, 8th edition 2013.
- 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 Activity Notification form.
- 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.

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. ☐ A hard copy of this application will be held for 7 years for audit purposes.
PRINCIPAL'S SIGNATURE		
DATE	/ /	

All fields must be complete before lodging this Activity Nomination Form.
Email this **signed page only** to Animal.Ethics@dete.qld.gov.au or fax it to (07) 3513 5989.
Ensure that you keep the signed hardcopy of this notification on file in your school's animal register for auditing purposes.