

CANE TOADS

(including dissection)

STANDARD OPERATING PROCEDURE

Approved 8 March 2023

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 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.

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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:

- ensuring persons in charge of an animal fulfil their duty of care to that animal
- obtaining animal ethics approval prior to conducting scientific activities involving animals and acting in accordance with that approval once granted
- 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 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. 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 must clearly identify how the use of animals is essential to achieving the learning objectives.** The justification should consider whether [non-animal alternatives](#) 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 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, 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 Primary Industries \(DPI\) 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 well-being 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 cane toads 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)
- dates and sources of acquisition
- disposal details and dates
- feeding logs (times/amount)
- breeding records
- 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.

SECTION 3 | STANDARDS OF PRACTICE

3.1. IS IT A FROG OR A TOAD?

The cane toad, *Rhinella marina*, was introduced into Australia in 1935 to control cane beetles. This release, a failed attempt at biological control, has created a serious pest species that has multiplied in plague proportions and now toads are found throughout much of Queensland.

Schools should be aware that native frog eggs and tadpoles are protected in Queensland and that the taking, moving, keeping or dealing of them is prohibited without a permit.

It is very difficult to identify juvenile frogs and tadpoles from juvenile toads and tadpoles. Identification guides such as [How to identify cane toad tadpoles from frog tadpoles](#) should be utilised. The [FrogID](#) (Australian Museum) app can be used to identify frogs and toads in the wild.

If you are able to identify juvenile frogs from juvenile toads, separate them. All frogs must be returned to the site they came from. Toads, both juveniles and adults, should be removed from the site, humanely euthanased and disposed of.

If you are unable to absolutely differentiate frogs from toads, return all the amphibians to the site they came from.

The taking of frogs by schools for educational purposes is not encouraged. Schools that seek to take tadpoles to place them in an aquarium to observe metamorphosis should only obtain tadpoles of 'least concern' species (i.e. species that are common or abundant and likely to survive in the wild) and only from school-owned land. Frogs must be released immediately following metamorphosis back to the place they were originally taken from. If the species cannot be identified as being of least concern, no collection should be undertaken.

Movement of frogs and tadpoles may pose a risk to the environment, specifically when translocating animals.

3.2. PHYSICAL ATTRIBUTES OF CANE TOADS

The cane toad is an extremely toxic creature and should be handled with great care.

The average adult toad is 10-15 cm in length. They have an upright stance and prefer tracks, roads and low grasslands because they have limited ability to jump. They are active at night during the warm months of the year. During the day or in cold/dry weather toads shelter in moist crevices and hollows.

The back of a toad is pale brown in colour with dark brown blotches and many large warts. There are prominent parotoid glands behind the eyes and immediately above and behind the eardrums. The protruding eyes have thick warty eyelids. The underbody of a toad is granular with a cream surface and brown specks and flecks. The toad's fingers are unwebbed and the toes are fully webbed.

Toad spawn is easily identified as it consists of masses of eggs in long colourless jelly-like chains. A female toad can lay 35,000 eggs in one season.

Toad tadpoles are small black tadpoles with globular bodies and pointy snouts. They swim and feed in schools. The tadpole stage can last between three and twenty weeks.

More information can be found on the [Department of Primary Industries website](#).

No animals or plants are to be taken from National Parks ([Nature Conservation \(Animals\) Regulation 2020](#)).

3.3. HANDLING TOADS

Students are not encouraged to handle toads. Personal protective equipment (laboratory coat/apron, safety goggles, gloves) are essential as squeezed toads can squirt a toxic substance from glands at the back of their head. If this substance goes directly into eyes or is rubbed with a hand or arm that has the toxin on it, then blindness or serious eye conditions may result. It is very important that hands and arms are thoroughly washed with soap after working with toads.

Cane toads may be kept without a licence or permit. However, it is illegal to release a non-native animal to the wild.

Refer to activity [4.1. Capture, restraint and handling](#) for further information.

3.4. ENVIRONMENT

SPACE Glass aquaria or terraria are ideal enclosures for toads. The space required depends on the size and number of toads. In general, the kind of environment set up should mirror the habitat of the species, including providing shelter to allow toads to withdraw.

TEMPERATURE Only tropical species require some extra warmth (best provided by a light globe). Note - overheating will kill most.

LIGHT Natural daylight (filtered) is adequate.

VENTILATION Any (non-rusting) fly wire is adequate.

SHELTER Moistened but not wet, 10 cm of sand, soil and leaf litter. Rocks, bark and hollow branches, plastic tubing, plastic matting and stainless-steel boxes in which to hide may be useful. Plants and other vegetation can enrich the environment. The space should be clean at all times.

3.5. FOOD REQUIREMENTS

TYPE Cane toads are opportunistic feeders and will eat almost anything, but most of their food in the wild consists of insects (beetles, ants, termites and crickets). In captivity, toads should be provided with a variety of insects as monotonous diets can cause dietary deficiencies, e.g. too many mealworms.

Dried fish food and/or boiled lettuce are ideal for tadpoles.

QUANTITY An adequate food supply for one or two toads can be caught by hand but larger numbers of toads may require food to be bred or caught using traps. Mealworms, blowflies, fruit flies and crickets are easy to breed. Food provided to tadpoles should be provided in adequate amounts, as lack of food may result in cannibalism.

WATER The aquarium should be sprayed regularly with water, e.g. fine garden spray gun, to ensure that both the aquarium and toads are always moist. A plastic, glass or earthenware dish should be sunk into the soil with its lip at ground level and water replaced as often as necessary to keep it fresh.

3.6. SUPERVISION AND MONITORING

Live animals must be inspected at least once a day to assess health and wellbeing. Feeding, watering and cleaning logs/schedules must be easily accessible, preferably displayed, for ease of monitoring.

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

Staff should ensure that appropriate records are maintained.

3.7. 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 contact and 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, natural disasters, vandalism)
- arrangements for power outages (e.g. checking on backup power, battery level checking)
- 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 the breed)
- a schedule of persons authorised to respond to emergencies and engage veterinary assistance.

3.8. HUMANE KILLING AND EUTHANASIA

Those charged with the responsibility for catching cane toads need to be either closely supervised or thoroughly trained in the identification of cane toads so that native species of frogs are not taken and killed by mistake.

The QSAEC recommends that euthanasia is conducted at the school, using one of the methods described below, and including appropriate planning for the collection and delivery of the toads. Toads must be handled and euthanased quickly and efficiently by a competent operator. It is not appropriate for school-aged children to be responsible for killing toads.

These methods must only be undertaken by a properly trained member of the school staff. Refer to [ANZCCART Guidelines for the humane killing of cane toads](#) for detailed instructions. Products must be used in accordance with supplier Safety Data Sheet information and manufacturer's instructions.

METHOD 1: HOPSTOP® TO EUTHANASE THE CANE TOAD

Hopstop® is an aerosol spray that is commercially available e.g. from hardware stores. This method of euthanasia is acceptable when:

- the toad is treated with sufficient spray to anaesthetise and then kill it quickly and effectively, therefore two sprays on the back of the animal is recommended, particularly for animals over 10cm long. Limiting the spray to the back of the toad should ensure that the animal is suitable for the purposes of dissection.
- toads are confirmed as dead prior to dissection.

To euthanase the cane toad:

- the cane toad must be held in a container prior to administering the HopStop®
- administer the HopStop® according to the manufacturer's directions
- leave the toad undisturbed until it dies (at least 1-2 hours).

METHOD 2: REFRIGERATION FOLLOWED BY FREEZING

Refrigeration of a toad to bring its core temperature to below 8 °C, followed by placing it in a freezer where its body temperature will continue to drop and it will die without regaining consciousness, is acceptable when:

- sufficient time in refrigeration is provided to ensure that the toad becomes unconscious before freezing. As the size of the toad and the number of toads put together in one container will influence the time required for body temperature to fall below 8 °C, the toads must be kept refrigerated at least overnight.
- confirmation that the toads are deeply unconscious and totally unresponsive occurs prior to transferring them to a freezer
- the toads remain in a freezer for at least a further 48-72 hours to ensure death
- all toads must be confirmed as dead prior to dissection.

This method may cause technical issues associated with cell damage during the freezing process that may render it impractical for users where recovery of intact cells from any tissue or organ is required.

METHOD 3: REFRIGERATION, FOLLOWED BY USE OF CLOVE OIL AND FREEZING

As an additional measure to ensure a toad is unconscious before moving it into the freezer as outlined in Method 2 above, place one or two drops of clove oil onto the toad's skin. The natural anaesthetic present in

clove oil is easily absorbed through the toad's skin.

The restrictions outlined in Method 2 apply to this method as well.

CONFIRMATION OF DEATH

A number of criteria must be met before confirming that the toad is dead -

- loss of righting reflex – the toad will not right itself onto its ventral surface when turned onto its back;
- loss of withdrawal reflex – there will be no response to a light squeeze to the skin in-between the digits;
- loss of deep pain reflex – there will be no response to moderate pressure applied to a digit bone;
- absence of respiratory movement – cessation of the throat movements that indicate breathing;
- absence of heart contractions – cessation of heart beat as determined by observing the chest for a visual cardiac impulse beneath the skin, and/or by palpation of the chest and/or by listening with a stethoscope.

3.9. DISPOSAL

Carcasses must be disposed of in accordance with local council regulations.

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 for dissection are minimum requirements, careful consideration must be given to determine ratios that are most effective in supporting and safeguarding animal wellbeing.

4.1. CAPTURE, RESTRAINT AND HANDLING

Category 3 – moderate to high impact				
Activity	Objective	3R activities	Ratios	References
Capture, restraint and handling	To instruct students in the procedures for capturing, restraining and handling cane toads	Theoretical learning, modelling, step-by-step guides, simulations	Instructors:Students 1:30 instructing 1:30 supervising Students:Animals 3:1 observing 1:1 performing	3.3. Handling toads

Students, parents and carers are instructed and provided with take home information on safe collection, care and transport. **Refer to Appendix A for a suggested letter to parents/carers and Appendix B for the protocol for collection of toads.**

IDENTIFICATION Students must be instructed not to collect any toad that appears sick or injured or whose behaviour is unusual. Any toads with missing body parts, signs of disease or infection or severe distress will be euthanased and disposed of through the routine laboratory disposal system. Students must check toads morning and night.

CAPTURE Students must be instructed in safe, humane collection and care including correct handling, housing, moisture and warmth, for example, a 2 litre sized ice cream container with a lid containing air-holes. Students may collect toads on an arranged night. A net is an ideal method for capture.

HANDLING When collected, they should be held in cupped hands and not squeezed. Handling should be minimised and latex gloves should be worn over hands.

HOUSING AT HOME If kept overnight, they should be kept in a suitable moist and warm ventilated container for a period of less than 18 hours.

HOUSING AT SCHOOL If kept at school, they should be in a suitable moist and warm ventilated container for a period of less than 8 hours.

COLLECTING THE CANE TOAD Have all necessary equipment ready before handling the toad – gloves, plastic bag, eye protection and plastic container with lid. Label the container with CANE TOAD.

Pick the toad up firmly, preferably with your hand over its back, and place it in the plastic bag and secure the top.

Place the bag and toad into the plastic container and put the lid on. If kept overnight, they should be kept in a suitable moist and warm ventilated container for a period of less than 18 hours.

TRANSPORT Live captured toads may be transported to school the next morning for euthanasia.

POISON Salmonella is a zoonotic disease that may be carried by frogs and toads. The risk of student infection is assessed as low. Students and staff will wear latex gloves and use mild disinfectant during the dissection procedure.

All parts of the cane toad (including their eggs and tadpoles) should be considered toxic and should not be

handled without adequate personal protective equipment. At the very least, this should include wearing latex gloves and eye protection. Where adult toads are concerned, individuals handling them should also wear a full-face shield, as stressed toads can squirt toxin from the parotoid glands behind their eyes. Hands must be washed after handling and dissection.

The poison can cause severe skin and eye irritation and should be washed off with water immediately if contact occurs. Medical attention should be sought if necessary.

Appropriate first aid measures should be undertaken immediately if contact with toxins occurs. Refer to the Poisons Information Line on 131126 for more information on cane toad poisoning.

Refer to [3.8. Humane killing and euthanasia](#) for acceptable methods for humane killing of captured toads.

4.2 ROUTINE HOUSING

Category 3 – moderate to high impact				
Activity	Objective	3R activities	Ratios	References
Routine housing	To instruct students in routine housing requirements	Theoretical learning, modelling, videos	Instructors:Students 1:30 instructing Students:Animals 1:1 performing	3.4. Environment

AT HOME Toads are kept in suitable moist warm and ventilated containers for a period of less than 18 hours.

AT SCHOOL Toads are kept in suitable moist warm and ventilated containers for a period of less than 8 hours.

TEACHERS advise students on suitable container type (e.g. 2 litre sized clean ice cream container with a lid containing air holes).

4.3 EUTHANASIA

Category 3 – moderate to high impact				
Activity	Objective	3R activities	Ratios	References
Euthanasia	To instruct students in the appropriate method of euthanasia of cane toads	Theoretical learning, step-by-step guides, modelling, videos, simulations	Instructors:Students 1:30 instructing 1:1 supervising Students:Animals 30:1 observing	3.8. Humane killing and euthanasia

To ensure complete euthanasing of toads, it is important to plan for the collection and delivery of the toads.

The QSAEC recommends that euthanasia is conducted at the school, using one of the methods described in [Section 3.8 Humane killing and euthanasia](#). Toads must be handled and euthanased quickly and efficiently by a competent operator using any of the methods described in [Section 3.8](#).

CONFIRMATION OF DEATH Refer to [Section 3.8](#) for criteria to be met before confirming that the toad is dead.

4.4 DISSECTION AND DISPOSAL

Category 3 – moderate to high impact				
Activity	Objective	3R activities	Ratios	References
Dissection and disposal	To instruct students in the dissection of cane toads	Theoretical learning, modelling, step-by-step guides, simulations	Instructors:Students 1:30 instructing 1:3 supervising Students:Animals 30:1 observing 3:1 performing	Procedure to be conducted as detailed below.

The decision to demonstrate or have students participate in a toad dissection will be at the discretion of the teacher, in line with the relevant year level curriculum and the school's curriculum plan. Once death of the toad is confirmed, the procedure below must be used when completing a toad dissection with students.

TOAD DISSECTION PROCEDURE

Begin the dissection by placing the toad on its back and pinning it to the board through its feet.

Make the necessary incision/s and pin back the skin layer to the right and the left side of the toad.

Cut through the abdominal wall and pin out the flaps of the abdominal wall on either side.

INTERNAL INSPECTION

Identify the significant organs of the digestive system and trace the pathway linking these organs. Note observations and sketch the relative positions of these organs.

Identify the significant organs of the respiratory system and trace the pathway linking these organs. Note observations and sketch the relative positions of these organs.

Identify the significant organs of the circulatory system and trace the pathway linking these organs. Note observations and sketch the relative positions of these organs.

DISPOSAL

Upon completion of a dissection activity, all toads and tissue are placed into a plastic bag which are then sealed and stored in a freezer, until disposal in the garbage disposal system or medical disposal system within the school site.

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.
DPI	Queensland Department of Primary Industries
QSAEC	Queensland Schools Animal Ethics Committee
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 , 8 th edition 2013 (updated 2021)

SECTION 6 | REFERENCES

- ANZCCART – Guidelines for the Humane Killing of Cane Toads
<https://anzccart.adelaide.edu.au/ua/media/471/a15-cane-toads.pdf>
- Australian Museum – Cane Toad
<https://australianmuseum.net.au/learn/animals/frogs/cane-toad/>
- Department of Primary Industries – Cane toad
<https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/other/cane-toad>
- Toad Scan – Is it a cane toad?
https://feralscan.org.au/toadscan/pagecontent.aspx?page=toad_toadsandnativefrogs
- Frogsafe Inc – How to identify cane toad tadpoles from frog tadpoles
<https://www.frogsafe.org.au/index.php/cane-toads/identification>
- NSW Department of Planning and Environment – Cane toads
<https://www.environment.nsw.gov.au/topics/animals-and-plants/pest-animals-and-weeds/pest-animals/cane-toads>
- Pestsmart – About cane toads
<https://www.pestsmart.org.au/pestsmart-factsheet-cane-toad/>
- Queensland Frog Society Inc – ‘Be Toadally Sure’ Campaign
<http://www.qldfrogs.asn.au/be-toadally-sure-campaign/>

APPENDIX A | SUGGESTED LETTER TO PARENTS/CARERS

Attach an information sheet on collection and handling of toads.

Dear Parent/Carer,

Thank you for agreeing to assist in the collection of cane toads for

.....
(insert details of class and activity)

for the period to
(commencement date) (end date)

This letter is to advise you of your responsibilities. According to the *Animal Care and Protection Act 2001 (Qld)*, a person in charge of an animal has a duty of care to that animal and must take all reasonable steps to ensure that the animal's needs are provided for as follows:

1. provision of food and water
2. provision of appropriate accommodation or living conditions
3. freedom to express normal behaviour
4. treatment of disease or injury
5. appropriate handling of the animal to avoid causing fear and distress.

These provisions apply to all animals, including pest species such as toads.

Prior to asking for your assistance in this activity, the school must ensure that the animal will be responsibly cared for by a person competent to do so. Once the toads are captured, it is your responsibility to ensure that these needs (based on the internationally recognised 'Five Freedoms' of animal welfare, mentioned above) are upheld as a matter of your duty of care obligation.

Please ensure that you are provided with all necessary care information, equipment, food and other requirements prior to accepting duty of care responsibility for this activity. Should an after-hours emergency arise (such as the need for veterinary care) during the time that you are caring for the animal, please contact:

..... on telephone number for advice.
(Insert here the name and contact telephone number of school staff member, after-hours veterinary clinic or experienced animal carer with which the school has made prior arrangements.)

Please ensure that when toads are taken to school they are safely and directly handed over to the class teacher or other staff member who is responsible for this activity.

To accept responsibility for the abovementioned animals, please sign and return to the school the section below.

Yours faithfully

.....
(School principal)

✂

I, (insert name of parent/carer) agree to care for and follow the protocol below for the care of the cane toads for the period to

I have read and understood the above information and will take all reasonable steps to ensure that the five needs, as listed above, are provided to the animal for which I am in charge.

APPENDIX B | PROTOCOL FOR THE COLLECTION OF TOADS

1. Have all necessary equipment ready before handling the toad – gloves, plastic bag, eye protection and plastic container with lid. Label the container with CANE TOAD.
2. Always wear thick rubber or latex gloves and eye protection when collecting toads.
3. Pick the toad up firmly, preferably with your hand over its back, and place it in the plastic bag and secure the top. Ensure ventilation is available.
4. Place the bag and toad into the plastic container and put the lid on. Ensure ventilation is available.
5. If kept overnight, toads should be kept in a suitable moist and warm ventilated container for a period of less than 18 hours.

PLEASE NOTE: Cane toads may be kept without a licence or permit

SECTION 7 | APPLICATION/ACTIVITY NOTIFICATION FORM

To seek QSAEC approval for animal use activities covered by this SOP, please complete the online [Activity notification form](#) (ANF) prior to the activities commencing.

Ensure all required fields are completed in the ANF and submit as per the outlined instructions.