

This Standard Operating Procedure (SOP) is applicable to all UniSQ Research Workers who care for and use Animals for Scientific Purposes. The procedure must only be performed by those persons who have been deemed competent, and who believe they remain competent to do so. Access to supervision by suitably qualified staff whilst undertaking this procedure is encouraged, where required.

Species

- *Rhinella marina* (cane toads)

Purpose

The purpose of this SOP is to provide information to people considering euthanising cane toads, particularly as part of surveying and research on wildlife, specifically why they are euthanised and how to euthanise them.

Cane toads are introduced vertebrate pest species and have well described negative impacts on Australian wildlife as competitors (e.g. to native frogs), predators (of a wide range of native species of invertebrates and vertebrates e.g. frogs) and by killing a wide range of native species that attempt to eat cane toads and are subsequently poisoned. Furthermore, cane toads are still dispersing across Australia and on this basis they should be humanely euthanised to stop their dispersal, competition, predation and poisoning.

Definitions

Not applicable.

Linked SOPs

SOP ID number	SOP title
WL005	Removing amphibians from pitfall traps
WL009	Microchipping cane toads
WL010	Handling cane toads
WL012	Dry pitfall trapping for vertebrates

Potential hazard to Research Workers

UniSQ Risk Management Plan ID number	UniSQ Management Plan title
RMP_2020_4960	Wildlife research and teaching fieldwork

Personal Protective equipment required

- Disposable examination gloves – various sizes
- Eye protection – Safety glasses
- Long sleeve shirt

Animal wellbeing considerations

Perceived stressors	Management strategy
Disease risk	Handlers must wash hands thoroughly before and after handling cane toads.

Placement of cane toad into zip-lock bag	This procedure must be performed by an experienced operator wearing disposable gloves.
Stress from prolonged process	Handlers must be sufficiently trained prior to starting work on cane toads so that the process is undertaken quickly.

The overall perceived level of risk to an animal undergoing this procedure is:

- High
 Medium
 Low

Substances to be administered

Substance	Dose	Route	Purpose
Not applicable to this SOP			

Equipment/ materials required

- Refrigerator with freezer – in approved UniSQ laboratory
- Zip-lock bags
- Permanent marker pen

Site specification or location requirements

At locations/ fields outlined in UniSQ AEC approved application that includes the use of this SOP.

Waste disposal

Not applicable.

Duration of the procedure

- To place the zip-lock bag containing the cane toad in the refrigerator then on the next day into the freezer compartment – less than two minutes.

Procedure

1. This procedure to be performed by a competent UniSQ staff member or suitably trained student.
2. Ensure PPE is being worn and eyes are protected.
3. Label zip-lock bag with “Cane toad”, your name, the date, the time and UniSQ AEC approval number using the permanent marker.
4. Capture the cane toad by holding it around the pelvis such that pelvis and back legs are held within your hand.
5. Place the cane toad into a labelled zip-lock bag and zip-lock the bag closed with plenty of air and then place the zip-lock bag containing the toad immediately into the <4°C refrigerator and leave for a least 48 hours.
6. Take the cane toad in the zip-lock bag out of refrigerator, record that date and time, and then place the cane toad into the -25°C freezer compartment of the refrigerator and leave there for at least 48 hours.
7. Remove the toad in the zip-lock bag from the freezer compartment and dispose of the dead cane toad in the zip-lock bag into UniSQ Biological waste.

Training, qualifications or competencies required

Researchers with relevant experience or qualification can only undertake this SOP to complete the procedures required.

Student researchers must receive appropriate training and supervision from UniSQ research supervisors or qualified individuals prior to undertaking procedures.

References

RSPCA Knowledgebase. [What is the most humane way to kill a cane toad? – RSPCA Knowledgebase.](https://kb.rspca.org.au/knowledge-base/what-is-the-most-humane-way-to-kill-a-cane-toad/)
<https://kb.rspca.org.au/knowledge-base/what-is-the-most-humane-way-to-kill-a-cane-toad/>

SHARP, T., LOTHIAN, A., MUNN, A. & SAUNDERS, G. (2011). CAN001. Methods for the field euthanasia of cane toads. <https://www.environment.gov.au/biodiversity/invasive-species/publications/can001-methods-field-euthanasia-cane-toads>

Licences and permits

Any required licences and/or permits to undertake the procedure(s) under this SOP must be obtained before undertaking this SOP.

SOP approval and review history

Date	Version	Review Pathway	Notes
17/12/2020	0.0	3/12/2020 UniSQ AEC “Subject to Modifications.” 17/12/2020 Reviewed and approved by the UniSQ AEC Executive.	N/A
23/06/2021	0.1	23/06/2021 Added under “Licences and permits”, the words: “Any required licences and/or permits to undertake the procedure(s) under this SOP must be obtained before undertaking this SOP.”	
28/08/2023	0.2	28/08/2023 Converted SOP to new UniSQ branding and revised all reference of ‘USQ’ to ‘UniSQ’ (‘waste disposal’ not included in previous version).	UniSQ 2022 Rebrand
19/10/2023	1.0	05/10/2023 UniSQ AEC “Subject to Modifications” with final review and approval delegated to UniSQ AEC Executive. 19/10/2023 Updated SOP reviewed and approved by the UniSQ AEC Executive	