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Dissecting cane toads in WA

Posted by Anonymous on Fri, 2015-03-06 11:43

Dissecting cane toads in WA: Could you please advise on the status of importing cane toads into WA as preserved specimens. There has been a recommendation recently for Lab Techs to dissect cane toads imported from Queensland instead of other frogs or toads. My understanding is that, as they are a declared pest, a permit must be obtained for every import from Dept Agriculture and Dept Parks and Wildlife.

Can you comment on disposal issues- any pet, wild animal or bird that gets into a bin or land fill and eats a toad will die a horrible death.

By purchasing cane toads, are you actually paying someone to breed cane toads? Surely supporting breeding native or non-toxic frogs or toads for specimens is a better choice.

Voting:



No votes yet

Year Level:

Senior Secondary

Laboratory Technicians:

Laboratory Technicians

Showing 1-1 of 1 Responses

Dissecting cane toads in WA

Submitted by sat on 06 March 2015

Updated 06 January 2023

Thank you for your multiple questions regarding cane toads. I will answer them separately below.

Cane toads

Cane toads, *Rhinella marina*, were introduced into Queensland in 1935 to control scarab beetles, which were pests to sugar cane. The cane toad is tough, adaptable, as well as being poisonous throughout its life cycle and has few predators in Australia. This is bad news for competing native amphibians, and it may be responsible for the population decline of the few snakes and other species that do prey on it.¹

Cane toads have been very successful as an invasive species, expanding their range through Queensland, northern New South Wales, the Northern Territory and the north of Western Australia.²

Status of importing dead cane toads into WA

Under the WA [Biosecurity and Agriculture Management Act](#) 2007,³ cane toads are a declared pest. For **live** toads, an import and keeping permit is required from the Department of Agriculture and Food in WA, where strict conditions must be met in order for the application to be approved. There is no current policy prohibiting importing dead cane toads to WA. The Department of Agriculture and Food in WA was consulted and we were advised that a policy statement would be written, permitting the importation of dead cane toads into WA.⁴ This will then provide the opportunity for schools to use dead cane toads for dissection purposes in science.

Dissection of cane toads

Science ASSIST is not aware of any breeders of cane toads.

A cane toad dissection allows the teacher to cover many aspects of body systems in amphibians including: skeleton, musculature, heart and arterial, venous, digestive and respiratory, urogenital and nervous systems in a series of practicals using the same specimen.⁵

Sourcing of cane toads should be from an authorised supplier, who has humanely euthanized them. Two sources of cane toads that comply with this are:

- Dissection Connection <https://dissectionconnection.com.au/>⁵ supply cane toads frozen. The toads are sourced in Queensland and are euthanized following procedures set out by Sharp et al "Methods for the field euthanasia of cane toads".⁶
- Southern Biological <https://www.southernbiological.com/>⁷ supply Queensland Cane Toads, *Rhinella marina*.

Note: Details of these suppliers have been compiled by Science ASSIST team members who, in the course of their laboratory employment, have found these businesses to provide merchandise which is suitable for school laboratories.

When handling, students should wear PPE (laboratory coat/apron, safety goggles, nitrile or rubber gloves), and demonstrate good hygiene by not touching their face or eyes and paying particular attention to hand washing after the dissection. A [site-specific risk assessment](#)⁸ should be carried out prior to handling cane toads. This risk assessment should address the maturity of students carrying out the dissection with regard to the toxins that are contained within the parotid gland behind the eyes of the toad.

An excellent source of information regarding the handling and disposal of cane toads is contained in the document

[‘Cane Toads \(including dissection\) Standard Operating Procedure’](#)⁹ Cane toads are also dissected as part of the education program by the WA Department of Parks and Wildlife. There is useful information, including teacher resources, on their website.¹⁰

Disposal of cane toads

As with all dissection material, toads that have been dissected should be securely wrapped in several sheets of newspaper and double bagged before disposal in general refuse for deep burial in landfill sites.¹¹ Secure wrapping and double bagging will generally deter animals from eating dissected toads in garbage bins, in preference for more easily attained food sources.

Alternative dissection materials

Sourcing alternative dissection materials is an option to consider. Science ASSIST recommends you consult with your jurisdictional education department and animal ethics committee, suppliers, the head of science and teachers at your school, whilst examining standard operating procedures and risk assessments before making a decision on the dissection specimen that best suits the learning area.

References

- ¹ Australian Museum website, (2021, February 4), ‘*CaneToad*’
<https://australian.museum/learn/animals/frogs/cane-toad/>
- ² Australian Government. Department of climate change, energy, the environment and water, (2021, October 10), ‘*Feral animals in Australia – cane toads*’, <https://www.dcceew.gov.au/environment/invasive-species/feral-animals-australia/cane-toads>
- ³ Australian Government Department of Justice, (2022, June 18), ‘*Biosecurity and agriculture management act 2007*’,
https://www.legislation.wa.gov.au/legislation/statutes.nsf/main_mrtitle_2736_homepage.html
- ⁴ Kirkpatrick, Win. 2015. Department of Agriculture and Food in WA. Personal communication.
- ⁵ Dissection Connection website, (2021, March), search ‘*Cane Toads*’ <https://dissectionconnection.com.au/>
- ⁶ PestSmart website, Sharp, T., Lothian, A., Munn, A. & Saunders, G., (2011), (accessed 2022, December 8), ‘*Methods for the field euthanasia of cane toads. Standard Operating Procedure*’,
<https://pestsmart.org.au/toolkit-resource/methods-for-the-field-euthanasia-of-cane-toads/>
- ⁷ Southern Biological website, (2022), ‘*Toad, male (or female), frozen*’,
<https://www.southernbiological.com/search-results-page?q=toad>
- ⁸ Science ASSIST website, (2014, July), ‘*Risk assessment template*’,
<https://assist.asta.edu.au/resource/2298/risk-assessment-template?search-id=67a51e5>
- ⁹ Queensland Government Department of Education, (2021, March 10), search ‘*Cane Toads (including dissection) Standard Operating Procedure*’, <https://education.qld.gov.au/curriculum/stages-of-schooling/animals-in-education/QSAEC/forms-and-publications>
- ¹⁰ WA Government Department of Biodiversity, Conservation and Attractions, (accessed 2022, December 8), ‘*Cane toads*’, <https://www.dpaw.wa.gov.au/management/pests-diseases/cane-toads>

¹¹ Riskassess website (2022), *'Issues related to dissections'*, <https://www.riskassess.com.au/info/dissections>

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