

# Local Cane Toad Incursion Response Plan

## Coffs Harbour City and Bellingen Shire Council areas.

<b>Target Species</b>	<b>Cane Toad</b> <i>Rhinella marina</i>	<b>Plan Date:</b>	October 2021
		<b>Date for review</b>	September 2022
<b>Stakeholder Participants</b>	<ol style="list-style-type: none"> <li>1. Coffs Harbour City Council (CHCC)</li> <li>2. Bellingen Shire Council (BSC)</li> <li>3. Coffs Harbour Regional Landcare (CHRL)</li> <li>4. Bellinger Landcare Inc (BLI)</li> <li>5. Bellingen Urban Landcare (BULC)</li> <li>6. Coffs Harbour and District Local Aboriginal Land Council (CHLALC)</li> <li>7. Jaliigirr Biodiversity Alliance (JBA)</li> </ol>		
<b>Objective</b>	<ul style="list-style-type: none"> <li>• To raise community awareness of the impact of cane toads and encourage members of the public to report sightings of cane toads</li> <li>• To provide a coordinated rapid procedural response to a report of a cane toad incursion into the Coffs Harbour and Bellingen local government areas</li> <li>• To reduce the risk of cane toad incursions into these areas and to ensure cane toads do not establish breeding populations</li> <li>• To engage Gumbaynggirr communities to develop stories and ceremony that protect Gumbaynggirr Nation from the cane toad.</li> <li>• To humanely euthanise all cane toads captured</li> </ul>		
<b>Justification</b>	<ul style="list-style-type: none"> <li>• Cane Toads are highly invasive and can spread quickly into new areas. They are listed as one of the world's 100 worst invasive species. <a href="http://www.iucngisd.org/gisd/100_worst.php">http://www.iucngisd.org/gisd/100_worst.php</a></li> <li>• They will feed on almost any terrestrial animal and compete with native amphibians for food and breeding habitats. Their toxic secretions are known to cause illness and death in domestic animals that come into contact with them, such as dogs and cats, and wildlife, such as snakes and lizards. Human fatalities have been recorded following ingestion of the eggs or adults.</li> <li>• Native species most likely to be impacted in CHCC and BSC LGA's include spotted-tailed quoll, lace monitor, sand goanna, dingo, frog-eating snakes and bird species. Predation by cane toads of native frogs, invertebrates, small snakes and mammals are also a critical issue.</li> <li>• Coffs Harbour and Bellingen LGA are within the <a href="#">Cane Toad Biosecurity Zone</a>. This zone has been established to help slow the spread and further establishment of cane toads in NSW.</li> <li>• The invasion and establishment of the Cane Toad in NSW has been identified as a "key threatening process" under the Biodiversity Conservation Act 2016.</li> <li>• The <a href="#">NCLLS Regional Strategic Pest Animal Management Plan (2018-23)</a> identifies cane toads as an "Alert species". The plan identifies working together is critical to ensuring early detection, awareness and the swift and effective management of alert species incursions.</li> </ul>		
<b>Constraints &amp; Challenges</b>	<ul style="list-style-type: none"> <li>• There is no broad scale method to control the cane toad. However, maintaining awareness of cane toads, reporting their presence and managing them responsibly when detected will help in slowing the spread and further establishment of cane toads in NSW.</li> <li>• There are many vectors by which cane toads can invade an area including being transported in landscape supplies (e.g. sugar cane mulch, pot plants), building materials (e.g. besa blocks, steel frames), undercarriage of caravans and motor homes</li> <li>• Cane toads can breed in most still or slow-flowing water, and tolerate salinity levels up to 15%. The female lays 8000 to 35000 eggs at a time and may produce two clutches a year. The eggs hatch within 24-72 hours. cane toad can grow very quickly and may reach sexual maturity within one year.</li> <li>• Native frogs, such as the endangered giant barred frog, can be miss-identified as a cane toad</li> <li>• Limited funding</li> </ul>		
<b>Site Status</b>	<ul style="list-style-type: none"> <li>• CHCC and BSC LGA's are currently cane toad free</li> <li>• Reports of cane toads being introduced into the area occur annually</li> <li>• The majority of reporting occurs in the summer months</li> <li>• In 2019 there were confirmed reports of cane toad incursions in Toormina, Urunga and Boambee areas and in 2020 a report at Emerald Beach. In April 2021 confirmed reports at Boambee and Corindi Beach.</li> </ul>		

<b>Procedural response to a report of a cane toad incursion</b>	
<b>Response when a member of the public finds a cane toad</b>	<ol style="list-style-type: none"> <li>1. Collect the cane toad and place it in a secure container</li> <li>2. Take a photo of the cane toad with your phone</li> <li>3. Download "Feral Scan" App, select "Toad" report the sighting and upload the photo If you do not have Feral Scan either: - <ol style="list-style-type: none"> <li>i) Go to the NSW DPI website and fill in the "report an unusual animal sighting" form at:- <a href="https://www.dpi.nsw.gov.au/biosecurity/forms/report-an-unusual-animal-sighting">https://www.dpi.nsw.gov.au/biosecurity/forms/report-an-unusual-animal-sighting</a></li> <li>ii) Contact your local council biosecurity officer or Landcare office and they will collect the relevant details from you and report to DPI</li> </ol> </li> <li>4. DPI staff will confirm the animal is a cane toad and notify the person to take it to a local Vet to euthanise and determine its gender and reproductive status. If it is a native frog DPI will notify the person to release the frog.</li> </ol>
<b>Response to confirmation by DPI of a cane toad incursion</b>	<ol style="list-style-type: none"> <li>1. DPI will notify North Coast Local Land Services of a confirmed cane toad report and the details of the location.</li> <li>2. DPI &amp;/or NCLLS will investigate and if required will contact Local Council and Landcare to activate this local plan.</li> </ol> <p>When this plan is activated then:</p> <ol style="list-style-type: none"> <li>3. Local Council Biosecurity Officer and Landcare will coordinate searches at cane toad incursion site. Search options will include: <ol style="list-style-type: none"> <li>a. Landcare cane toad incursion team conducting a night search of the location where the cane toad was reported.</li> <li>b. Daylight search of the incursion site by cane toad scent detection dog team.</li> <li>c. If assessed as necessary a follow-up search at the incursion site in summer after a suitable rainfall event that could trigger cane toad activity and mating behaviour.</li> </ol> </li> </ol>
<b>Cane Toad Control Options</b>	
<b>Hand Collection (Cane toad muster)</b>	<p>Cane toad can be located at night using spotlights. Cane toads commonly move from their refuge areas after dusk to feed, they may sit in the open looking for food and are easily approached and caught. Use a small net or gloved hands.</p> <p>Cane toads do not leave their refuge every night, Frogwatch SA website reports that cane toads come out from their refuges about every third night but always before 6 nights.</p> <p>On the north coast NSW cane toad activity in summer usually increases at night after rainfall.</p> <p>Broadcasting the male cane toad call using portable speakers at night can lure cane toads into calling and revealing their location.</p> <p><b>RECOMMENDED ACTION</b></p> <ul style="list-style-type: none"> <li>• Spotlight search and call back survey to be conducted ASAP at the site where a cane toad has been reported.</li> <li>• Follow-up search at the site following rainfall.</li> </ul>
<b>Cane Toad Scent Detection Dog</b>	<p>A professionally trained cane toad scent dog significantly increases the likelihood of locating and catching cane toads at incursion sites. A scent dog can search a large area in a short period of time and detect cane toads when they are hidden within their refuge. Scent dogs are not reliant on visual detection as is the case with human searches.</p> <p>Cane toad scent detection dogs have been proven effective in front-line cane toad detection in Queensland, Western Australia and Botany Bay in NSW.</p> <p><b>RECOMMENDED ACTION</b></p> <ul style="list-style-type: none"> <li>• Daylight searches by the scent dog to be conducted ASAP at the site where the cane toad has been reported and follow-up searches at night and after rainfall as required.</li> </ul>
<b>Tadpole Trap</b>	<p>Funnel traps, also known as minnow traps, baited with a chemical attractant that is specific to cane toad tadpoles. These may be constructed from plastic or mesh.</p> <p>The simplest type is made by cutting a large plastic soft-drink bottle around the middle and attaching the pointed end so that it points back towards the base to form a funnel (re: Canetoadinoz website)</p> <p>The chemical attractant can be extracted from the cane toad parotid gland or a dead cane toad is also reported as being effective.</p> <p><b>RECOMMENDED ACTION</b></p> <ul style="list-style-type: none"> <li>• Tadpole traps to be deployed in waterbodies where it is suspected cane toad adults are breeding.</li> </ul> <p>Note: There have been no records of cane toads breeding in the CHCC and BSC LGA's to date.</p>
<b>Adult Cane Toad Trap</b>	<p>Mature toads are nocturnal and like open areas with lighting that attracts insects. Light traps that attract insects that in turn attract cane toads can be effective in the right conditions. Trap effectiveness can be enhanced by using an acoustic lure (male cane toad call). Several designs are available on line for example the Toadinator by ACTA.</p> <p><a href="https://static1.squarespace.com/static/5a5ebfbed74cff30017f4e32/t/5b04e8846d2a736439ff1faa/1527048360601/ACTA+Toadinator+Booklet+2018.pdf">https://static1.squarespace.com/static/5a5ebfbed74cff30017f4e32/t/5b04e8846d2a736439ff1faa/1527048360601/ACTA+Toadinator+Booklet+2018.pdf</a></p>
<b>Gumbaynggirr Stories to Prevent Cane Toad Spread</b>	<p>Northern Border and Southern Border stories created by Gumbaynggirr community to redirect the movements of Cane Toads and to lower their populations.</p> <p>STORY TO BE CREATED AND FINALISED BY LOCAL COMMUNITY – High Level of Community involvement would benefit in empowering the message for the Cane Toad to Receive and not enter Gumbaynggirr Lands.</p> <p>Story Creation and Story Sharing Community Workshops will be held to broaden the audience.</p>

<b>Cane Toad Euthanasia</b>	<p>The RSPCA provides 2 methods for the humane euthanasia of cane toads that do not require formal training: Using Hopstop and the cooling then freezing method, details can be found here:- <a href="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/</a></p> <p>Other methods for field euthanasia of cane toads with formal training are detailed here. <a href="https://pestsmart.org.au/toolkit-resource/methods-for-the-field-euthanasia-of-cane-toads/">https://pestsmart.org.au/toolkit-resource/methods-for-the-field-euthanasia-of-cane-toads/</a></p> <p>Cane toads when caught must be humanely killed. It is not acceptable to mistreat cane toads or subject them to euthanasia as "sport".</p>		
<b>Safe Work Methods</b>	<p>Safe work methods to be developed for recommended control options adopted in this plan.</p> <p><u>Handling of cane toads</u> Collect cane toads using a small net or gloved hands. Eye protection is recommended. Handle toads gently and do not squeeze them (If you do not squeeze they do not squirt).</p> <p><u>Transportation of cane toads</u> Cane toads are to be placed in a cloth bag inside a container with a secure lid with air holes.</p>		
<b>Raising Community Awareness</b>			
<b>Wider Community Workshops</b>	Run community information events to raise the wider community awareness and understanding of the impact of cane toads and steps they can take to keep their community free of cane toad incursions.		
<b>Training Cane Toad Incursion Team members</b>	Training for Cane Toad Incursion Team members who have signed up to be the first responders to a cane toad incursion report. Training to include cane toad identification, search techniques, transport, handling and WHS.		
<b>Cane Toad Monitoring</b>			
<b>Follow-up surveys at cane toad incursion sites</b>	<p>Locations where cane toads have been previously reported to be checked in subsequent seasons to ensure no cane toads have been missed and breeding populations have not established.</p> <p>Maintain a record of all sites searched and results.</p>		
<b>Feral Scan / Toad Scan</b>	<p>Feral Scan is an App that allows you to record sightings of cane toads in your local area. Toad Scan can be accessed via the Feral Scan App or by the website – <a href="http://www.toadscan.org.au">www.toadscan.org.au</a></p> <p>RECOMMENDED ACTION</p> <ul style="list-style-type: none"> <li>Report all cane toad incursions on either Feral Scan or Toad Scan</li> <li>Create a local control group on Toad Scan website that is accessible only to stakeholder participants. This will provide detailed information on the location of all sightings and persons reporting sightings in the CHCC and BSC area.</li> </ul>		
<b>Agency Liaison</b>			
<b>North Coast Local Land Services (NCLLS)</b>	<ul style="list-style-type: none"> <li>Coordinate investigation at a cane toad incursion site</li> <li>If required notify Council &amp; Landcare to activate this plan to undertake local cane toad searches</li> </ul>	<b>Department of Primary Industry (DPI)</b> Ian Turnbull 0438 920 398; <a href="mailto:ian.turnbull@dpi.nsw.gov.au">ian.turnbull@dpi.nsw.gov.au</a>	<ul style="list-style-type: none"> <li>Respond to online and feral scan reports of cane toad incursions in the biosecurity area</li> <li>Notify NCLLS of confirmed cane toad report</li> <li>Notify Council of confirmed cane toad report requiring activation of this plan to undertake local cane toad searches</li> </ul>
<b>NPWS - Department Planning Industry &amp; Environment (DPIE)</b> Greg Wallace <a href="mailto:Greg.wallace@environment.nsw.gov.au">Greg.wallace@environment.nsw.gov.au</a>	<ul style="list-style-type: none"> <li>Conduct cane toad searches on NPWS lands in response to cane sightings</li> <li>If required notify Council &amp; Landcare to activate this plan to assist with cane toad searches on park</li> </ul>	<b>Mid-north Coast Joint Organisation</b>	<ul style="list-style-type: none"> <li>liaise with the Mid-north Coast Joint Organisation to coordinate cane toad control activities and investigate options for centralised funding to address cane toad control programs</li> </ul>
<b>Plan Stakeholder Responsibilities</b>			
<b>Bellingen Shire Council</b> Contact TBC	<ul style="list-style-type: none"> <li>Respond to DPI or NCLLS confirmed report of a cane toad in the LGA by activating this plan</li> <li>Promote public reporting of cane toad sightings</li> <li>Liaise with mid north coast joint organisation</li> </ul>	<b>Coffs Harbour City Council</b> Sally Spinner 0438 260 355 <a href="mailto:sally.spinner@coastalworks.com.au">sally.spinner@coastalworks.com.au</a> Tim Bekis <a href="mailto:tim.bekis@coastalworks.com.au">tim.bekis@coastalworks.com.au</a>	<ul style="list-style-type: none"> <li>Respond to DPI or NCLLS confirmed report of a cane toad in the LGA by activating this plan</li> <li>Promote public reporting of cane toad sightings</li> <li>Liaise with mid north coast joint organisation</li> </ul>
<b>Bellinger Landcare Inc</b> Sandy Eager 0410147454 <a href="mailto:office@bellingerlandcare.org.au">office@bellingerlandcare.org.au</a>	<ul style="list-style-type: none"> <li>Maintain register of contacts for Cane Toad Incursion Team</li> <li>Coordinate Cane Toad Incursion Team searches at confirmed cane toad incursion site</li> </ul>	<b>Coffs Harbour Regional Landcare</b> Melanie Craig 66511308 <a href="mailto:Projects@coffsharbourlandcare.org.au">Projects@coffsharbourlandcare.org.au</a>	<ul style="list-style-type: none"> <li>Maintain register of contacts for Cane Toad Incursion Team</li> <li>Coordinate Cane Toad Incursion Team searches at confirmed cane toad incursion site</li> </ul>

<b>Bellingen Urban Landcare</b> Liz Brown 2.liz.brown@gmail.com	<ul style="list-style-type: none"> <li>- Maintain register of contacts for Cane Toad Incursion Team</li> <li>- Coordinate Cane Toad Incursion Team searches at confirmed cane toad incursion site</li> </ul>	<b>Coffs Harbour and District Local Aboriginal Land Council</b> Mathew Smith	<ul style="list-style-type: none"> <li>- Create a Gumbayngirr cane toad story to redirect cane toad movements and lower their population</li> <li>- Perform cane toad story at a ceremony to broadcast the message to cane toads and the wider community</li> </ul>
<b>Jaliigirr Biodiversity Alliance</b> James Birnie jimmieb53@gmail.com	<ul style="list-style-type: none"> <li>- Support the creation of Cane Toad Incursion Teams</li> <li>- Promote public reporting of cane toad sightings</li> </ul>	<b>Canines for Wildlife</b> Brad Nesbitt 0497360042 caninesforwildlife@gmail.com	<ul style="list-style-type: none"> <li>- Run cane toad scent detection dog searches at incursion sites if requested</li> </ul>

2020/21 Cane Toad program												
Task	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021
Stakeholders working group meeting			xxx	xxx								
Community Workshops Boambee, Woolgoolga, Bellingen									xxx		xxx	

2021/22 Cane Toad program												
Task	Jul 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022	Apr 2022	May 2022	Jun 2022
Stakeholders working group meeting			xxx									
Review cane toad plan			xxx									
Surveillance exercise				xxx								
Activate cane toad incursion team as required					xxx	xxx	xxx	xxx	xxx	xxx		

#### References/Bibliography

[https://www.canetoadsinoz.com/other\\_control\\_options.html](https://www.canetoadsinoz.com/other_control_options.html)

<https://www.frogwatchsa.com.au/species/view/36>

[http://www.frogwatch.org.au/index.cfm?action=cms\\_page&p=466&m=102&sm=198&section=1](http://www.frogwatch.org.au/index.cfm?action=cms_page&p=466&m=102&sm=198&section=1)

Euthanasia

RSPCA - <https://kb.rspca.org.au/knowledge-base/what-is-the-most-humane-way-to-kill-a-cane-toad/>

Pest Smart - <https://pestsmart.org.au/toolkit-resource/methods-for-the-field-euthanasia-of-cane-toads/>

ANZCCART - <https://anzccart.adelaide.edu.au/system/files/media/documents/2019-07/an29022016.pdf>

Legislation

Biosecurity Act 2015 - <https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2015-024#sch.3>

Biodiversity Conservation Act <https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2016-063#sch.4>