



**SAVING OUR SPECIES**

**Stuttering Frog**

**2022-2023 annual report card**

**Summary**

<b>Management sites</b>	Dorrigo and New England National Parks; Watagans, Blue Mountains and Kanangra-Boyd National Parks; Werrikimbe and Barrington Tops National Parks and Copeland Tops State Conservation Area
<b>Action implementation</b>	10 (of 10) management actions were fully or partially implemented as planned for the financial year.
<b>Total expenditure</b>	\$0 (\$0 cash; \$0 in-kind)
<b>Partners</b>	Environment and Heritage Group; University of Newcastle



**Scientific name:**  
*Mixophyes balbus*

**NSW status:**  
Endangered

**Commonwealth status:**  
Vulnerable

**Management stream:**  
Landscape species

Photo: Peter Richards

# Priority management site: Dorrigo and New England National Parks

## Local government area:

Armidale Regional; Bellingen; Coffs Harbour; Kempsey; Nambucca Valley

## Partners:

University of Newcastle

## Population outcome



On track



On track (inferred)



Not on track (inferred)



Not on track

## Monitoring

Species population monitoring by one or more methods indicates response to management over time and provides an outcome measure.

<b>Monitoring metric</b>	Species abundance
<b>Annual target</b>	Collect baseline data to inform plan
<b>Long term target</b>	To be determined.
<b>Monitoring result</b>	Decline in New England but stable in Dorrigo
<b>Scientific rigour of monitoring method</b>	Moderate
<b>Conducted by</b>	University of Newcastle

## Management actions

The following actions are those identified as being required in financial year 2022-2023 to secure the species in the wild.

Threat	Management action	Implemented as planned?
Changes to natural water flows and water quality.	Collect water quality and macroinvertebrate data	Yes

## Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Changes to natural water flows and water quality.	Collect water quality data	Baseline data collection

## Site summary

This site is part of a grant project administered by the NSW Environmental Trust and led by University of Newcastle.

Individuals of the species are regularly detected at New England and Dorrigo sites. Chytrid is prevalent.

Tadpoles are also present.

# Priority management site: Watagans, Blue Mountains and Kanangra-Boyd National Parks

<p><b>Local government area:</b>          Blue Mountains; Central Coast; Cessnock; Hawkesbury; Hornsby; Lake Macquarie; Lithgow City; Mid-Western Regional; Muswellbrook; Oberon; Singleton; The Hills Shire; Upper Hunter; Upper Lachlan Shire; Wingecarribee; Wollondilly</p> <p><b>Partners:</b>          University of Newcastle</p>	<p><b>Population outcome</b></p> <ul style="list-style-type: none"> <li><span style="color: green;">●</span> On track</li> <li><span style="color: lightgreen;">●</span> On track (inferred)</li> <li><span style="color: orange;">●</span> <b>Not on track (inferred)</b></li> <li><span style="color: red;">●</span> Not on track</li> </ul> <p>The species population is inferred to be off track based on threat management being off track. The population trend is unknown at this time.</p>
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## Monitoring

*Species population monitoring by one or more methods indicates response to management over time and provides an outcome measure.*

Baseline monitoring conducted.

<b>Monitoring metric</b>	Species abundance
<b>Monitoring result</b>	Occupancy = 0%
<b>Scientific rigour of monitoring method</b>	Moderate
<b>Conducted by</b>	University of Newcastle

## Management actions

*The following actions are those identified as being required in financial year 2022-2023 to secure the species in the wild.*

Threat	Management action	Implemented as planned?
Disease - chytrid fungus.	Swab frogs and determine infection load. Five locations across the sites, minimum once per annum	Yes
Poor knowledge of the species' distribution, taxonomy and history of local extinction.	Promote FrogID app	Partial implementation - Focus has been on citizen science awareness via Zooniverse (as a result of 2 years of covid lockdowns).
Damage to habitat and impacts on water quality from forestry activities.	Collect baseline data	Yes
Predation of eggs and tadpoles by introduced fish.	Collect baseline data	Yes

## Threat outcome

*Assessment on the status of critical threats at this site.*

Threat	Annual target	Threat status
Disease - chytrid fungus.	Swab frogs and determine infection load. Determine chytrid prevalence and susceptibility of target species.	Baseline data collection
Damage to habitat and impacts on water quality from forestry activities.	Undertaken monitoring for baseline data collection	On track
Damage to habitat and impacts on water quality from forestry activities.	Undertake water quality monitoring	Baseline data collection
Predation of eggs and tadpoles by introduced fish.	Undertake aquatic surveys	Baseline data collection
Poor knowledge of the species' distribution, taxonomy and history of local extinction.	Collect baseline data on threats	Not assessed

## Site summary

This site is part of a grant project administered by the NSW Environmental Trust and led by University of Newcastle.

Target species was not detected in acoustic monitoring or as tadpoles in streams at any survey sites. Chytrid is present in all sites surveyed. Water quality is reasonable but has elevated levels of phosphorous and aluminium.

# Priority management site: Werrikimbe and Barrington Tops National Parks and Copeland Tops State Conservation Area

<p><b>Local government area:</b> Dungog; Kempsey; Mid-Coast; Port Macquarie-Hastings; Singleton; Upper Hunter; Walcha</p> <p><b>Partners:</b> University of Newcastle</p>	<p><b>Population outcome</b></p> <ul style="list-style-type: none"> <li><span style="color: green; font-size: 20px; margin-right: 10px;">●</span> On track</li> <li><span style="color: lightgreen; font-size: 20px; margin-right: 10px;">●</span> On track (inferred)</li> <li><span style="color: orange; font-size: 20px; margin-right: 10px;">●</span> <b>Not on track (inferred)</b></li> <li><span style="color: red; font-size: 20px; margin-right: 10px;">●</span> Not on track</li> </ul> <p>The species population is inferred to be off track based on threat management being off track. The population trend is unknown at this time.</p>
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## Monitoring

Species population monitoring by one or more methods indicates response to management over time and provides an outcome measure.

Baseline monitoring conducted.

<b>Monitoring metric</b>	Species abundance
<b>Monitoring result</b>	No individuals detected in surveys at the Watagans (will bring more sites online). Copeland Tops State Conservation Area and Werrikimbe National Park were not visited
<b>Scientific rigour of monitoring method</b>	Moderate
<b>Conducted by</b>	University of Newcastle

## Management actions

The following actions are those identified as being required in financial year 2022-2023 to secure the species in the wild.

Threat	Management action	Implemented as planned?
Disease - chytrid fungus.	Swab frogs and determine infection load. Five locations across the sites, minimum once per annum	Partial implementation - logistical delays
Damage to habitat and impacts on water quality from forestry activities.	Conduct monitoring	Partial implementation - logistical delays
Predation of eggs and tadpoles by introduced fish.	Conduct monitoring	Partial implementation - logistical delays
Poor knowledge of the species' distribution, taxonomy and history of local extinction.	Conduct target surveys	Partial implementation - logistical delays
Poor knowledge of the species' distribution, taxonomy and history of local extinction.	Collect genetic material	Partial implementation - logistical delays

## Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Disease - chytrid fungus.	Swab frogs and determine infection load. Determine chytrid prevalence and susceptibility of target species.	Baseline data collection
Damage to habitat and impacts on water quality from forestry activities.	Conduct monitoring	Baseline data collection
Damage to habitat and impacts on water quality from forestry activities.	Conduct monitoring	Baseline data collection
Predation of eggs and tadpoles by introduced fish.	Conduct surveys	Baseline data collection
Poor knowledge of the species' distribution, taxonomy and history of local extinction.	Collect baseline data to determine threat status	On track

## Site summary

This site is part of a grant project administered by the NSW Environmental Trust and led by University of Newcastle.

Site visits occurred to Barrington Tops National Park, but not to Copeland Tops State Conservation Area and Werrikimbe National Park this year. Infection remains prevalent in general frog populations at visited sites. Physico-chemical parameters of water quality at these sites indicate moderate condition. None of the target species was detected.