



## SAVING OUR SPECIES

# Lower Hunter Spotted Gum Ironbark Forest in the Sydney Basin and NSW North Coast Bioregions

2022-2023 annual report card

#### Summary

Management sites	Cessnock
Action implementation	7 (of 7) management actions were fully or partially implemented as planned for the financial year.
Total expenditure	\$66,210 (\$53,614 cash; \$12,596 in-kind)
Partners	Australian Government Bushfire Recovery Program; Biodiversity Offset Scheme - supplementary measures; BirdLife Australia; Cessnock City Council; Environment and Heritage Group; EPA North Coast Region; Hunter Local Land Services; Mindaribba Local Aboriginal Land Council; NSW Environmental Trust; University of Newcastle



Name: Lower Hunter Spotted Gum Ironbark Forest in the Sydney Basin and NSW North Coast Bioregions

NSW status: Endangered Ecological Community

Commonwealth

status: Not listed

Management stream: Ecological community (widespread)

Photo: Michael Murphy

# **Priority management site: Cessnock**



#### Monitoring

Ecological community viability monitoring by one or more methods indicates response to management over time and provides an outcome measure.

Ecological community monitoring was not conducted at this site this financial year - A comprehensive monitoring plan was developed for this project in 2022-23. As part of this process, it was determined that vegetation condition monitoring would only be undertaken every 5 years.

#### Investment

Participant	Cash	In-kind
Australian Government Bushfire Recovery Program	\$31,280	\$0
Biodiversity Offset Scheme - supplementary measures	\$4,423	\$0
BirdLife Australia	\$0	\$800
Cessnock City Council	\$0	\$1,732
Environment and Heritage Group	\$5,980	\$7,864
EPA North Coast Region	\$0	\$400
Hunter Local Land Services	\$6,599	\$0
Mindaribba Local Aboriginal Land Council	\$0	\$800
NSW Environmental Trust	\$5,332	\$0
University of Newcastle	\$0	\$1,000

### Management actions

The following actions are those identified as being required in financial year 2022-2023 to maximise the viability of the ecological community.

Threat	Management action	Implemented as planned?
Disturbance and degradation caused by recreational users such as trail bike riders and 4WD vehicles leading to erosion and introduction and spread of weeds.	Promote the Saving our Species program and conservation of threatened species within local communities. Commence NSW Environmental Trust funded project with University of Newcastle - creating community through communication. Support community engagement activities including Cessnock City Council's 'Our Bushland' campaign and Environmental Lands Study.	Yes
Disturbance and degradation caused by recreational users such as trail bike riders and 4WD vehicles leading to erosion and introduction and spread of weeds.	Rehabilitate degraded areas where unauthorised access was restricted at Regent Honeyeater captive-bred release site.	Yes
Dumping of rubbish, plants, and cars in areas of the TEC leading to disturbance of the site, weed invasion, and deliberately lit fires.	Remove illegally dumped rubbish throughout the project area. Install signage where required. Monitor illegal activity using remote cameras and issue penalty notices to offenders.	Yes
Encroachment of weeds, particularly around dumping sites where garden plants are deliberately discarded.	Engage contractor to undertake updated weed mapping and control within priority areas.	Yes
Fragmentation, degradation, and loss of TEC affecting ecosystem function.	Engage with land managers, Mindaribba Local Aboriginal Land Council and Cessnock City Council, Biodiversity Conservation Trust and Hunter Local Land Services to manage and protect key parcels.	Yes
Inappropriate fires regime (too frequent and intense fires particularly from arson) leading to change in TEC structure and composition.	Install cable and bollard fencing to protect key areas of this ecological community in the project area. Work with Rural Fire Service to develop an Operational Fire Management plan for Tomalpin Woodlands.	Yes
Lack of long term protection for remaining TEC remnants and potential for change of land use causing further negative impacts.	Engage with land managers, Mindaribba Local Aboriginal Land Council and Biodiversity Conservation Trust to manage and protect key parcels. Complete environmental lands study for Cessnock City Council.	Yes

#### Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Inappropriate fires regime (too frequent and intense fires particularly from arson) leading to change in TEC structure and composition.	Determine the baseline area (hectares) of the ecological community within the site that has burnt more frequently than the recommended minimum fire interval	Baseline data collection
Encroachment of weeds, particularly around dumping sites where garden plants are deliberately discarded.	Re-assess distribution and density of weeds within the site	Baseline data collection
Dumping of rubbish, plants, and cars in areas of the TEC leading to disturbance of the site, weed invasion, and deliberately lit fires.	Establish a baseline on the extent and severity of illegal dumping across the site.	On track
Disturbance and degradation caused by recreational users such as trail bike riders and 4WD vehicles leading to erosion and introduction and spread of weeds.	Establish a baseline on the extent and severity of disturbance from recreational use across the site.	On track
Fragmentation, degradation, and loss of TEC affecting ecosystem function.	Document extent of fragmentation and native vegetation cover loss.	On track
Lack of long term protection for remaining TEC remnants and potential for change of land use causing further negative impacts.	Document the area (hectares) of the ecological community within protected areas	On track

#### Site summary

The Protecting the Cessnock forests and woodlands threatened ecological communities (TECs) *Saving our Species* project seeks to manage and protect 3 TECs, primarily Lower Hunter Spotted Gum-Ironbark Forest, Kurri Sand Swamp Woodland, Hunter Lowland Redgum Forest and the many threatened flora and fauna species which occur in these areas. A significant number of achievements were completed in 2022-23.

A comprehensive monitoring plan was developed. Lead indicators to be monitored for this ecological community include vegetation condition, bird diversity, and the extent and severity of key threats including fire (frequency and intensity), disturbance from recreational users, illegal logging/timber collection, and rubbish dumping. Vegetation condition will be monitored every 5 years, while the threats will be monitored systematically using a grid-based system every 3 years.

Baseline grid-based threat monitoring commenced in 2022-23, with a large section of Werakata National Park containing the 3 Cessnock TECs surveyed. Data was recorded at approximately 250 grid points spaced 200m apart on the extent and severity of threats including logging/timber collection, fire, disturbance from recreational use, rubbish dumping, weeds, and feral animals. The baseline threat monitoring is ongoing and is expected to be completed by the end of 2023. To date, the most notable impacts to the TECs observed during the grid surveys was from deer, with browsing and grazing impacts recorded across nearly all of the survey area.

The most recent vegetation condition monitoring of the Lower Hunter Spotted Gum-Ironbark Forest TEC was undertaken in 2020. A total of 10 vegetation integrity plots were surveyed and the average vegetation integrity (VI) score across these plots was 55. Vegetation condition monitoring will be undertaken again in 2025.

A total of 2km of bollard and cable fencing was installed along one of the boundaries of Werakata National Park on the eastern side of Mount Tomalpin, and other access control measures were constructed to protect conservation lands owned by Mindaribba Local Aboriginal Land Council (LALC). This fencing and the access control measures will protect an additional 400 ha, including areas of the TECs, from vehicle access and associated impacts such as illegal timber collection, rubbish dumping and arson.

A second successful captive-bred release of critically endangered regent honeyeaters occurred within the project area on lands owned by Mindaribba LALC. The release was feasible due to the site protection and access management works undertaken on these lands through the *Saving our Species* program and other funding sources since 2018.

A fire management operational plan for the Tomalpin Woodlands was developed with the NSW Rural Fire Service in 2022-23. This document outlines the actions that should be undertaken to manage and control of fires to protect environmental and cultural assets including regent honeyeater habitat and TECs.

A total of 24 deer were dispatched in Werakata National Park in June 2023 during an aerial shooting program by National Parks and Wildlife Service (NPWS) Lower Hunter.

Weed control was undertaken across 18 ha of priority (high density) weed zones in Werakata State Conservation Area targeting *Lantana*, ground asparagus and wild tobacco in 2022-23.

An NSW Environmental Trust funded project titled 'Creating Community through Communication: Using a Systems-based Framework to Foster Community Engagement within the Biodiversity and Culturally rich Cessnock Forests' commenced in 2022-23 within the *Saving our Species* key management site for the 3 Cessnock TECs. This project is a collaboration between the NSW Department of Planning and Environment Hunter Central Coast Biodiversity Conservation Division, University of Newcastle and Mindaribba LALC. The project aims to use a systems-based approach to communication to create long-term systemic and behavioural change, and increase co-located communities' ownership of and connection with threatened species.

Saving our Species 2022-2023 annual report card for Lower Hunter Spotted Gum Ironbark Forest in the Sydney Basin and NSW North Coast Bioregions. For more information refer to the specific strategy in the Saving our Species program.