



Koala Monitoring 2024

Scientific Report Summary

WHAT & WHY WE MONITOR

The iconic koala (*Phascolarctos cinereus*) is classified as endangered at State and National levels. Known as burribi in the Widjabul/Wia-bul language, the koala population of the Lismore City Council (LCC) Local Government Area (LGA) is recognised as one of the most important in New South Wales. To make good land management decisions for these shy, fussy eaters we must first know what is happening in the local koala population.

The LCC Comprehensive Koala Plan of Management for South-East Lismore (CKPoM) provides actions and a regulatory framework for the co-existence of people and koalas. The CKPoM requires monitoring of koala activity in the south-east of the Lismore LGA to be undertaken every three years. This is the third round of monitoring and was completed by Biolink Ecological Consultants. The 2023 study included 75 field surveys using the Spot Assessment Technique (SAT) method, which involves searching for koala scat (poo) under koala feed trees in the area of the CKPoM to determine activity levels. In addition, a desktop examination of LGA-wide historical koala records between 2017-22 was undertaken to explore where they are living and the impact of key threats.

THE RESULTS

The desktop study showed that koalas remain widely distributed. Across the LGA koalas were found to occupy 73% of the available habitat, which represents a 4.5% increase from the previous three generations. Areas supporting long-standing resident koala populations are extensive and are mostly concentrated in the south and north-east of the LGA. The largest (southern) cluster is located within the CKPoM area stretching to the boundary with Richmond Valley Shire and appears to be expanding westward. The north-east cluster covers the area of Repentance Creek, Dorrourby and Rosebank, and is also expanding.

RESULTS SNAPSHOT

75

Sites surveyed for koala activity

88%

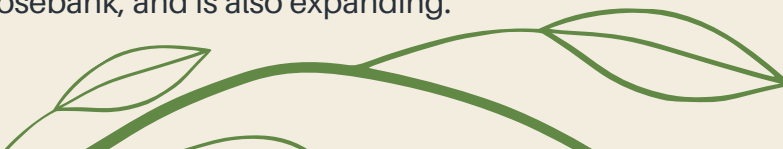
Habitat occupancy rate

48

Sites with significant/
resident koala activity

No Change

in area of occupancy &
activity levels since last study



THE RESULTS CONTINUED...

Consistent with previous studies, the main contributors to recorded koala deaths were disease (58%), vehicle-strike (23%) and dog attack (6%). Chlamydia-related illness is the most common disease, with females being substantially more impacted than males (2.27 female deaths: 1 male death). Analysis of the 302 known koala vehicle-strikes 2017-2023 revealed four major and nine minor blackspots, with no significant change in the number of strikes compared to previous studies.

Field-based survey of koala occupancy and activity levels at 75 sites yielded 66 sites with koala activity. This means that ~88% of the mapped koala habitat in the CKPoM area is occupied, far greater than the ~50% 'optimal occupancy' rate [1]. 48 sites had 'significant' activity, meaning that koalas are likely to reside at these sites. 41 of the sites surveyed were also surveyed in 2017 and/or 2020, and although there were some changes in activity levels at individual sites, there was no overall change in occupancy or activity levels across the study area.

WHAT DOES THIS MEAN?

"This report offers some reassurance for Lismore's koala population, which does not appear to be declining despite compounding threats. This is cause for celebration, but not complacency."

Kate Steel, Environmental Strategies Coordinator

The Richmond River floodplain has the highest koala occupancy known in the Northern Rivers. While the Lismore population does not appear to be experiencing the declines being seen in neighbouring LGAs or across NSW, results suggest that the CKPoM population may have plateaued as remaining koala habitat is likely near the maximum number of koalas it can support. This means that without increasing habitat the local koala population is unlikely to grow further, and the population is more vulnerable to unexpected events like a new disease or a change in the environment. This shines a light on the importance of looking after existing koala habitat and the need to connect and create appropriate new habitat across the LGA.

This study provides a targeted snapshot into the current activity and distribution of the koala population of Lismore. The results help Council and other land managers make decisions for koalas, including where we need to focus habitat restoration, revegetation, road strike mitigation and community education. It also raises important questions which help us direct future studies and recommends considerations for updates to our planning framework.

To learn more: Read the full report or contact environmentalstrategies@lismore.nsw.gov.au

NOTE: This field survey provides a snapshot of koala activity at the surveyed site locations only and does not indicate a lack of activity in areas which were not surveyed. Similarly, the desktop analysis is based on reported koala sightings, the absence of which does not necessarily indicate the absence of koalas.

[1] Phillips, S. Hopkins, M. and Shelton, M. (2011). Tweed Coast Koala Habitat Study. Unpublished reports to Tweed Shire Council prepared by Biolink Ecological Consultants, Uki, NSW.; Hopkins, M. and Phillips, S. (2012). Byron Coast Koala Habitat Study. Prepared on behalf of Byron Shire Council, Hotspots Fire Project, Nature Conservation Council of NSW and NSW Environment Trust, Sydney.