# Title NSW Koala Sentinel monitoring program - genomics data 2023 - 2024

#### **Abstract**

The Koala Sentinel Monitoring Program is a multi-year initiative designed to assess koala populations across six key locations in NSW. The program focuses on monitoring disease prevalence, genetic diversity, and ecological factors influencing koala populations. The data collected aims to identify and understand the complex interactions between environmental threats and koala population health, providing insights into long-term population trends. Since its launch, the program has completed one full monitoring cycle (Nov 2023 – Sept 2024) and is currently in its second round, which will conclude in September 2025.

#### Genomics data

This metadata statement describes the genomic and individual-level data collected during the first annual sampling period (2023–2024) and links to the publicly available whole genome resequencing (WGR) dataset.

#### Resource locator

Data Quality Statement Name: Data Quality Statement

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Data quality statement for Koala Sentinel monitoring program - genomic data 2023

2024

Function: download

Koala Sentinel monitoring program genomics data 2023 - 2024 Name: Koala Sentinel monitoring program - genomics data 2023 - 2024

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Six Sentinel sites are located across the NSW including Richmond Range National Park on the far north coast, Kanangra-Boyd National Park in the Greater Blue Mountains area, and national parks and reserves in Port Macquarie on the mid north coast, the Southern Tablelands, Narrandera in the Riverina, and Woronora Plateau south of Sydney.

Heat-sensing drones are used to find koalas at night, then animal handlers catch the koalas for assessment at a mobile field hospital run by the Taronga Conservation Society Australia's veterinary team. Each koala is given a health check, and samples are taken to assess their health, disease status and genetics. This dataset describes the genetic results across all 6 sites for 2024.

Function: download

NSW Sentinel Genomic WGR Metadata Summary - 2023 - Name: NSW Sentinel Genomic WGR Metadata Summary - 2023 - 2024

Protocol: WWW:DOWNLOAD-1.0-http--download

Summary - 2023 - Description: 2024

Genomic and individual-level data collected during the first annual sampling period (2023–2024) with a link to the publicly available whole genome resequencing (WGR) dataset on Amazon Web Services (AWS) public repository.

Function: download

### Unique resource identifier

Code 003600a1-d2d7-4761-8573-1a95212be7d0

Presentation form

Table digital

Edition 1

Dataset language

English

Metadata stand	ard	
Name	ISO 19115	
Edition	2016	
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/003600a1-d2d7-4761-8573-1a95212be7d0	
Purpose	Scientific analysis to understand koala population ecology	
Status	On going	
Spatial representation type	None	
Spatial referenc	e system	
Code identifying the spatial reference system	4283	
Additional information source	Genomic Data Metadata	
	This metadata file – Koala_Sentinel_Monitoring_Program_Genomic_Metadata_2023_2024.csv – describes whole genome resequencing (WGR) samples from sentinel koala populations. Genomic data is available via on AWS S3 via the URL link in the attached data.	
	Purpose: The metadata supports sample discoverability, ecological integration, and re-use in comparative genomics.	
	Metadata Fields: Column Name - Description	
	<ul> <li>Koala_ID- Unique identifier assigned to each sampled koala</li> <li>Location- Site or region where the sample was collected (6 primary locations)</li> <li>Collection_Date - Date the sample was collected (format: DD/MM/YYYY)</li> <li>Coverage - Mean WGR sequence coverage per sample</li> <li>Sex - Sex of the individual koala (M = Male, F = Female)</li> </ul>	

- Sex Sex of the individual koala (M = Male, r = remale)
  Notes Additional comments (e.g., sample quality, field observations)

# **Data Summary**

- Number of Samples: 259
- Locations Represented: Kanangra-Boyd NP, Narrandera, Port Macquarie, Richmond Range, Woronora Plateau, \* Southern Tablelands
  • Sequence Coverage: ~13.45X to ~32.61X
  • Sex Distribution: Both males and females

# **Topic category**

Keyword set	
keyword value	FAUNA-Native
	ECOLOGY
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	145.17
East bounding longitude	153.87
North bounding latitude	-35.17
South bounding latitude	-28.09
Vertical extent information	
Minimum value	-100
Maximum value	2228
Coordinate reference system	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
Temporal extent	
Begin position	2023-01-11
End position	N/A
Dataset reference date	
Resource maintenance	
Maintenance and update frequency	Annually
Contact info	
Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
Telephone number	131555
Email address	data.broker@environment.nsw.gov.au
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew
Responsible party role	pointOfContact

Responsible party

Contact position Data Broker

Organisation name NSW Department of Climate Change, Energy, the Environment and Water

Telephone number 131555

Email address <u>data.broker@environment.nsw.gov.au</u>

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Responsible party role pointOfContact

Metadata date 2025-05-20T21:10:38.392398

Metadata language