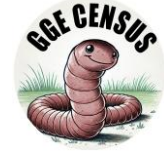


# Census of the Giant Gippsland Earthworm distribution in South and West Gippsland 2024–2026

A community snapshot of findings



## WHAT IS THE GIANT GIPPSLAND EARTHWORM?

### One of the world's largest earthworms

Rarely seen but often heard gurgling beneath damp soil

#### Habitat clues:

- Crayfish chimneys near creeks and springs
- Damp, clay-rich, south-facing slopes
- Riparian areas with buttercups



Over 1 metre long

Found only in South & West Gippsland

## THE PROJECT

In 2024, three adjoining Landcare Networks, the Gippsland Threatened Species Action Group and scientists launched the first major reassessment of the Giant Gippsland Earthworm (GGE) populations since the 1980s census.

Landholder surveys, field verification, review of historical records and the development of a new “GGE Census” reporting App were used to reassess the species across South and West Gippsland and see what may have changed in 40 years.

## KEY NUMBERS AT A GLANCE

*A community-powered census across South and West Gippsland*



**2,700+**

QUESTIONNAIRES  
DISTRIBUTED

Across communities,  
landholders, schools  
and organisations.



**311**

RESPONSES  
RECEIVED

Community members  
shared their knowledge,  
observations and  
experiences.



**212**

NEW GGE RECORDS  
ADDED

New observations of the  
Giant Gippsland Earthworm  
across South and  
West Gippsland.



NEW RECORDS  
BEYOND SOME  
HISTORIC LOCALITIES

GGE detected in new areas  
near the edge of the  
known range.

# HOW THE CENSUS WORKED



1

## HISTORIC RECORDS

Digitised and mapped 411 historic GGE records from the 1980s Museums Victoria census, with records dating back to 1875.



2

## COMMUNITY QUESTIONNAIRES

Distributed more than 2,700 questionnaires across South and West Gippsland and received 311 responses from landholders and community members.



3

## GGE CENSUS APP

Launched a purpose-built GGE Census App for community sightings and easy submission of photos and observations.



4

## REVISITING HISTORIC SITES

Attempted to identify property locations and roadside sites from earlier surveys to investigate whether GGE were still present after 40 years.



5

## COMMUNITY ENGAGEMENT

Promoted through newspapers, radio, social media, Landcare events, workshops and the South Gippsland Dairy Expo.



6

## FIELD VERIFICATION

Conducted targeted field investigations guided by historic records, community reports and App data.



Bringing together history, science and community effort to build the clearest picture yet of the Giant Gippsland Earthworm.

# WHAT DID WE FIND?



## GGE STILL PERSISTS ACROSS MUCH OF ITS KNOWN RANGE

The census confirmed that the Giant Gippsland Earthworm continues to occur across much of its recognised core range, including areas around:

- Korumburra
- Loch
- Nyora
- Poowong
- Warragul
- Drouin

More than 200 new records were added, refining our understanding of where populations still occur.



## DISTRIBUTION REMAINS PATCHY

The species does not occur continuously across the landscape. Instead, populations occur in scattered pockets where suitable soil moisture and habitat conditions persist.

These are the GGE's "Goldilocks" habitat requirements; conditions have to be just right for them to survive and thrive.



## SOME POPULATIONS APPEAR LONG-TERM AND PERSISTENT

Several historic sites still supported GGE populations decades after they were first recorded.

One roadside colony near Poowong may have persisted for almost 100 years, demonstrating the importance of long-term habitat stability.



## SOME HISTORICAL SITES MAY HAVE BEEN LOST

A large number of roadside sites first surveyed in 1990 no longer supported GGE populations.

At least 22 sites within Warragul and Drouin were identified as extinct.

Many of these sites are now within developed residential areas, resulting in soil disturbance, excavation and changes in hydrology contributing to habitat loss and localised extinction.



## COMMUNITY KNOWLEDGE REMAINS IMPORTANT

Landholders and community members contributed valuable observations, local knowledge and historical information that helped guide the census and field investigations.

# HOW PEOPLE ENCOUNTER GGE — THEN VS NOW

## 1980s — DURING FARM WORK



- Ploughing paddocks and digging post holes
- Dam construction and road building
- Draining swampy flats and seepage areas
- Clearing vegetation

"Worms looked like ribbons hanging from tynes of plough"

## TODAY — WHILE WALKING PROPERTIES

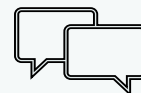


- Hearing gurgles while walking around the property (62%)
- Construction e.g. Fence, track or dam (31%)
- Ploughing and tree planting, gardening (13%)

This shift reflects less intensive soil disturbance across Gippsland farms today.

# COMMUNITY PARTICIPATION — WHAT WE LEARNED

Awareness of the GGE was remarkably high, with 96% of respondents familiar with the species. However, participation in the census was lower than expected:

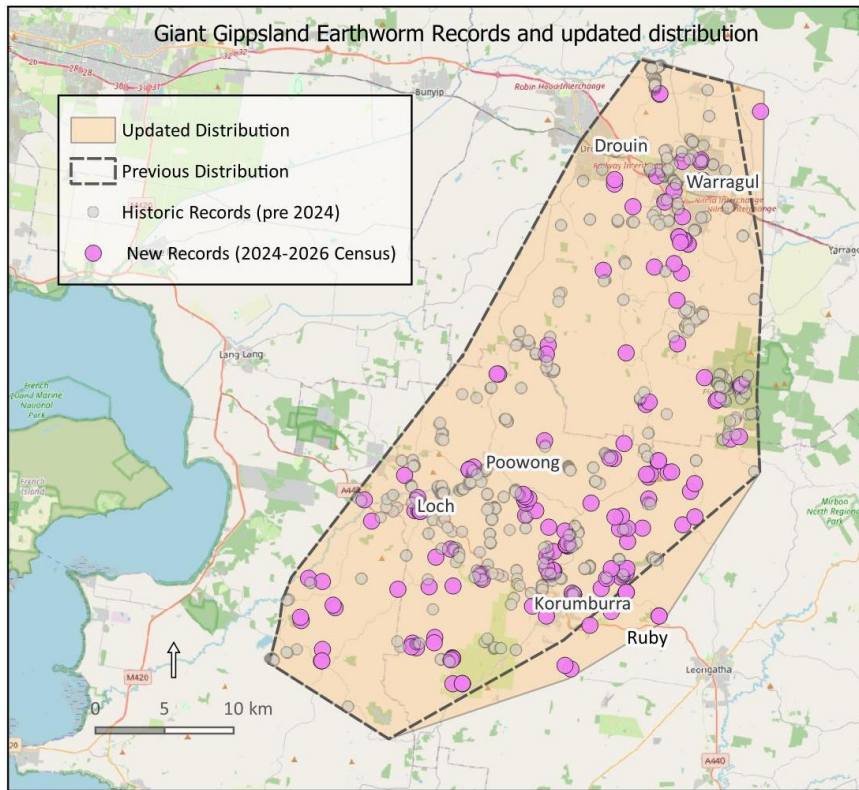


- Only 11% of landholders responded — compared with more than 20% in the 1980s
- 41% of respondents reported GGE on their properties — down from 83% in the 1980s
- Some landholders chose not to take part due to concerns about possible land use restrictions associated with reporting GGE and government overreach.
- Older landholders sometimes found online surveys and App-based reporting difficult to use



**Important:** The census was independent of local government and was not linked to the Environmental Significance Overlay (ESO) or land use restrictions. All information was kept confidential.

# WHERE ARE THE WORMS? — UPDATED DISTRIBUTION MAP



New records east of Korumburra (Ruby area) suggest the range extends slightly further east than previously mapped.

## WHERE TO FROM HERE?

### What this project shows



The GGE persists across much of its core range — often in the same pockets for many decades

Old family knowledge, community records and modern apps can track a species that is almost never seen

Dry survey conditions may have reduced detectability — ongoing monitoring matters

Low participation may mean GGE populations still remain undocumented

### Recommended next steps



Improve habitat mapping and predictive modelling



Continue collecting records using the GGE Census App



Continue investigating links between GGE activity, rainfall and climate conditions

### How you can help



The GGE Census App remains open. Please continue reporting:

- GGE sightings
- Gurgling sounds underfoot
- Areas of suitable habitat on your property

Because most GGEs occur on private land, every landholder observation matters

To download the free App:

Search for **'Giant Gippsland Earthworm'** in your app store.

Look for the App with the cartoon worm logo



**Thank you to all landholders, community members, Landcare groups and volunteers who contributed information, shared stories, and helped with field surveys.**

Project Partners: Gippsland Threatened Species Action Group • Bass Coast Landcare Network • South Gippsland Landcare Network • Latrobe Catchment Landcare Network • Oates Environmental Consulting • Invert-Eco Terrestrial Invertebrate Consulting • Ro Marks Consulting • VP-IT • Aviato Consulting Pty Ltd

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