

Arid Zone Monitoring Species Profile

Centralian blue-tongue lizard

Tiliqua multifasciata

Language names

Antherrarte, I kangker, Ilparnkwere, Kalamira, Langka, Lhwelk, Lungkara, Lungkarda, Lungkata, Lunkuta, Ngalyak, Ntharrarta, Nyarlamira, Palyu palyu, Pilirri, Ulhelke

National status in the EBPC Act: Not listed

IUCN Red List: Least concern



Image: Chris Jolly

Centralian blue-tongue lizard.

Animal Description

The centralian blue-tongue lizard is a robust lizard with short body and short tail. It is pale grey to grey-brown with orange to yellow-brown bands on body and tail, black stripe from eye to ear.

Key threats

No major threats, but preyed on by cats and foxes.

Habitat

The centralian blue-tongue lizard lives in semi-arid to arid sand plains and dunes with spinifex vegetation.

Centralian blue-tongue lizard tracks

Centralian blue-tongue tracks show the broad body track with a narrow trail mark, with claw marks on each side.

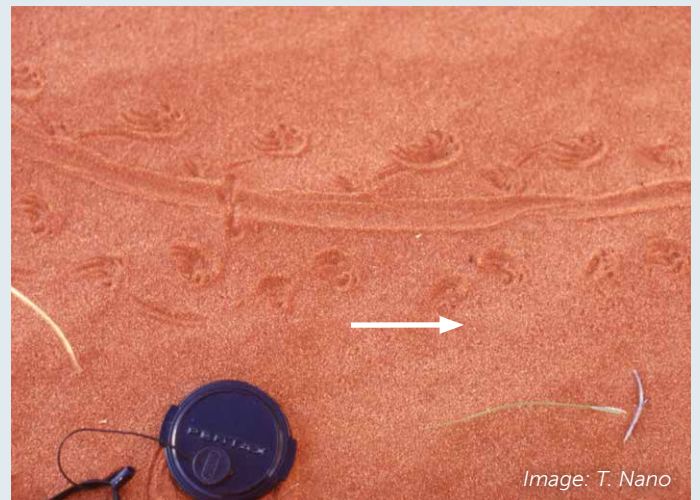


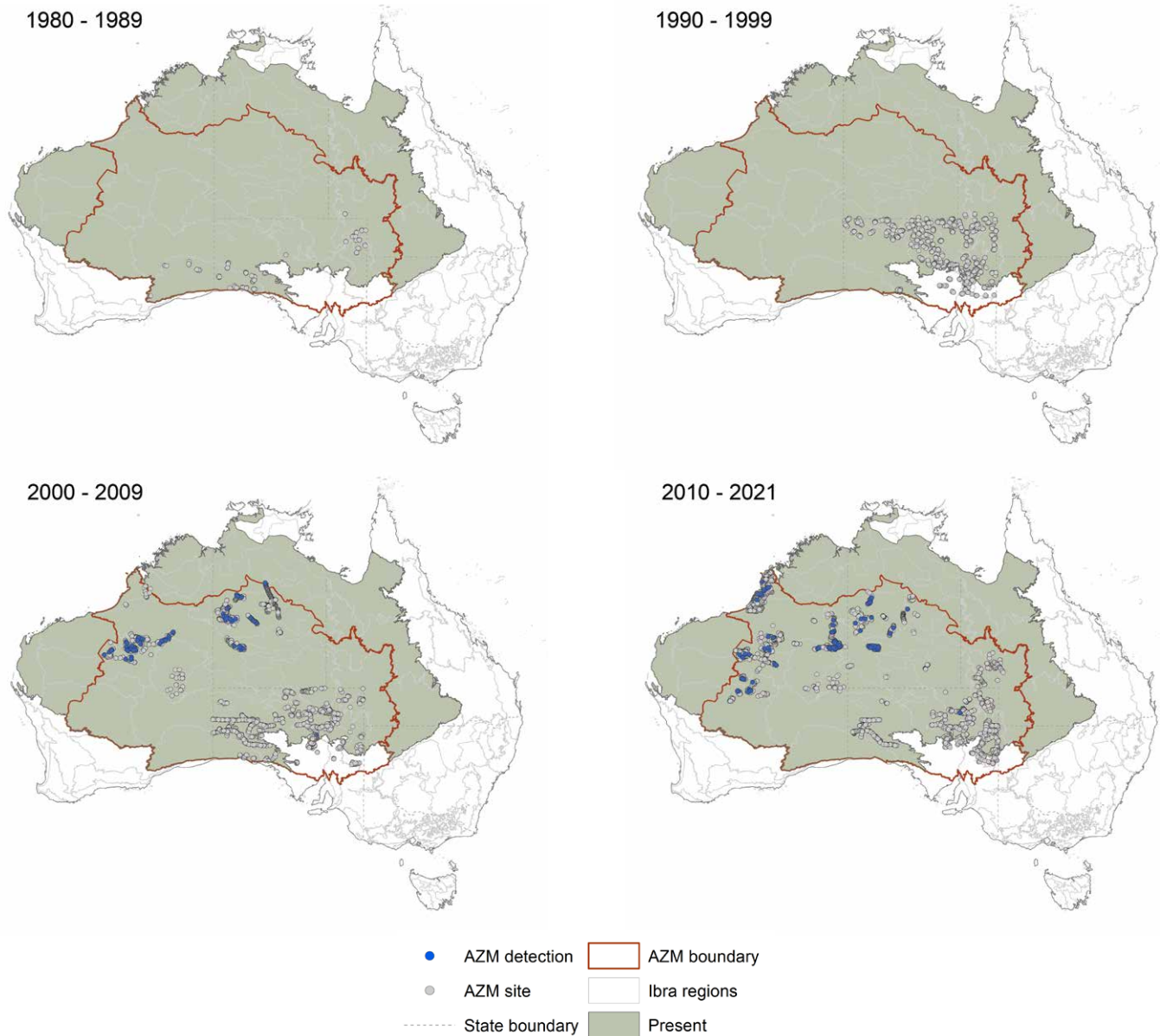
Image: T. Nano

Centralian blue-tongue tracks (arrow shows which way it is moving).

Arid Zone Monitoring project findings

Centralian blue-tongue lizard distribution

The maps summarise detections of centralian blue-tongue lizards over time in the AZM database. They show that centralian blue-tongue lizards have been detected in the north-western part of the AZM project area. Each blue dot shows a survey site where centralian blue-tongue lizards were recorded in that decade. The grey dots show all the other sites that were surveyed, but where centralian blue-tongue lizards were not recorded in that decade. These records were made by Indigenous Ranger groups, land councils, NGOs, government agencies and university researchers. The information about the overall distribution in the map background is taken from IUCN¹.



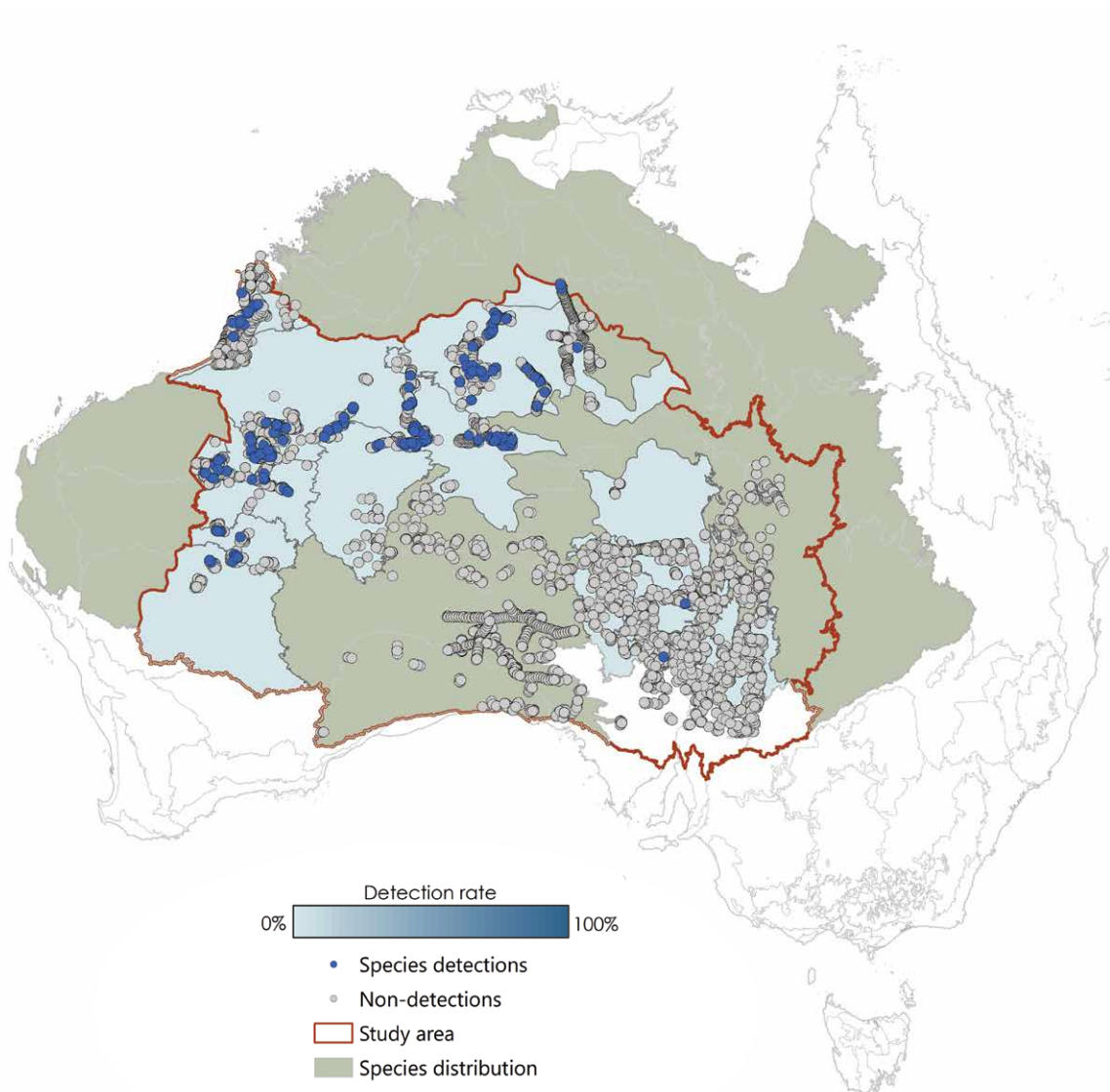
The map above show data shared by data providers with the AZM project. The data are from track and sign surveys. This method is great for detecting species that live in sandy deserts, but not as good for species that prefer rocky habitats, or species with distributions that are mostly outside the central deserts. The method also works best for larger-bodied animals with tracks that are easily identified.

It is possible that extra surveys have been carried out that have not yet been shared. If you see 'gaps' in the maps that you could fill by sharing your data, let us know.

Centralian blue-tongue lizard detection rates

Centralian blue-tongue lizards were detected at over 1% of all surveys in the AZM dataset. It was the 6th most commonly recorded reptile species.

The map below shows the average detection rate for centralian blue-tongue lizards across all surveys carried out in each bioregion, since the 1980s.

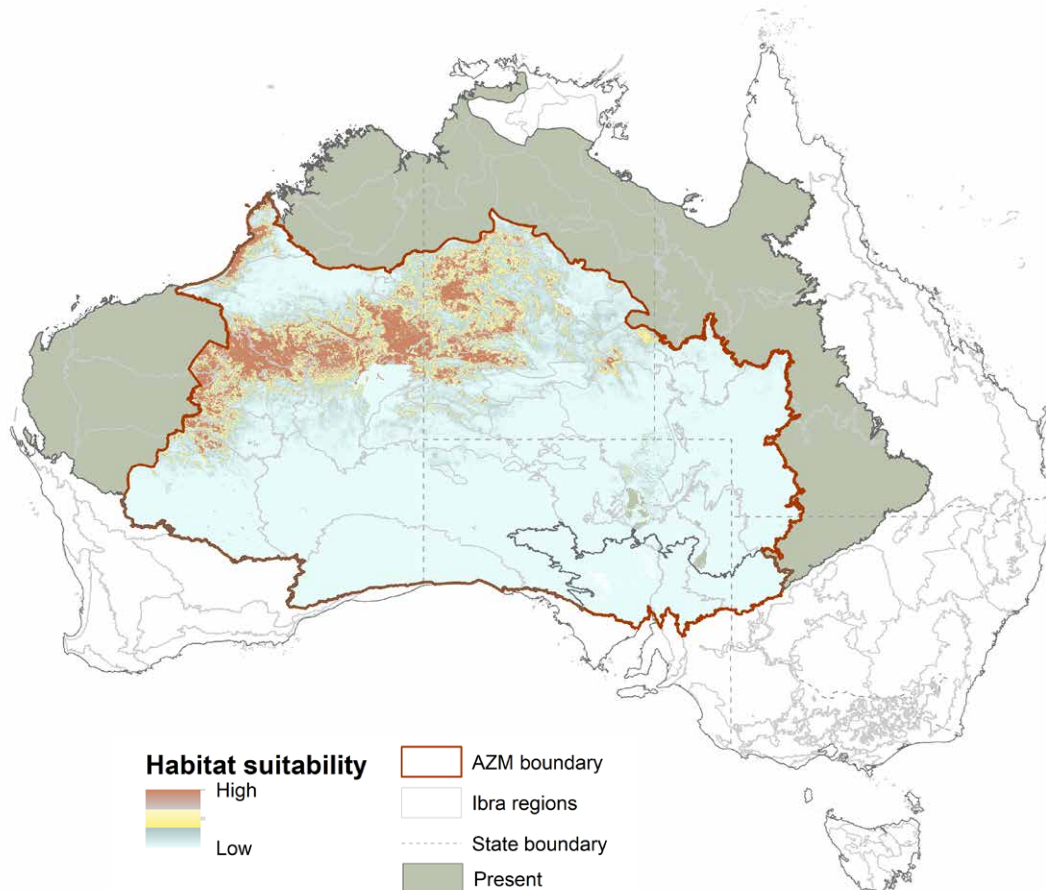


Things to think about when surveying for centralian blue-tongue lizards

- Survey during good conditions (in the early morning is best, not too windy or straight after rain).
- Organise to do surveys at regular times every year – for example, before the wet or hot season (October) and in the early dry season or early cool time (April).
- Follow advice of experienced trackers - know how to tell centralian blue-tongue lizard tracks apart from other species before you go to survey.
- If you want to see changes over time, you will need to go back to the same areas to sample over several years. If you want to see if management actions (feral animal culling or fire) are working, you need to sample many different sites, before and after the action. You might need help from a scientist to make the sampling design strong.

Centralian blue-tongue lizard habitat suitability

The habitat suitability model can tell us about where centralian blue-tongue lizards are most likely to be found. The analysis considered climate factors like annual, seasonal and daily temperature and rainfall; landform factors like elevation and slope; soil factors; and habitat factors like the amount of vegetation (NDVI) and fire frequency. The model suggests that centralian blue-tongue lizards prefer areas of higher elevation and high average temperatures, between 22-27 degrees Celsius. The map shows us that we can expect to find centralian blue-tongue lizards in all parts of the north-western desert, where the map shading is reddish brown. The map only shows habitat suitability inside the AZM project boundary, but centralian blue-tongue lizards are found outside the project area and might be common in other places too. The habitat suitability model does not predict well in large areas where there has not been any sampling, for example in parts of the Great Sandy Desert; getting more survey data from these areas would improve the model.



Further information

Arid Zone Monitoring project:

<https://www.nespthreatenedspecies.edu.au/projects/arid-zone-monitoring-surveys-for-vertebrates-across-arid-and-semi-arid-zones>

References

¹ Species distribution information compiled during a 2017 reptile assessment carried out by IUCN (<https://datadryad.org/stash/dataset/doi:10.5061/dryad.83s7k>), and updated by expert opinion (R. Tingley).