Arid Zone Monitoring
Species Profile

Large skinks

Desert skink is *Liopholis inornata*
Night skink is *Liopholis striata*

There are three species of large skink in the genus *Liopholis*. One, the great desert skink (*L. kintorei*) is nationally threatened and is sometimes the focus of desert surveys. The information in the AZM dataset on *L. kintorei* is presented in a separate species profile. This profile summarises the information on the other two species, *L. inornata* and *L. striata*.

Desert skink

Liopholis inornata

National status in EPBC Act: Not listed
IUCN Red List: Not listed

Animal Description

Smooth scaled skink with blunt head. Scales vary from yellowish brown to rich coppery red, with rows of black spots on body and bars on the tail.

Distribution

Desert country in southern WA across to southern Qld.

Habitat

Sand ridges and sand plains with spinifex and shrubs. Desert skinks dig burrow systems with hidden exit points.

Desert skink.

Desert skink burrow.

Night skink

Liopholis striata

Animal description

Smooth tailed skink with blunt head. Brown to brick red, scales have dark edges.

Distribution

Central deserts, WA, southern NT and NW SA.

Habitat

Sand plains and sand dunes with spinifex vegetation. Night skinks excavate deep burrow systems with multiple entrances.

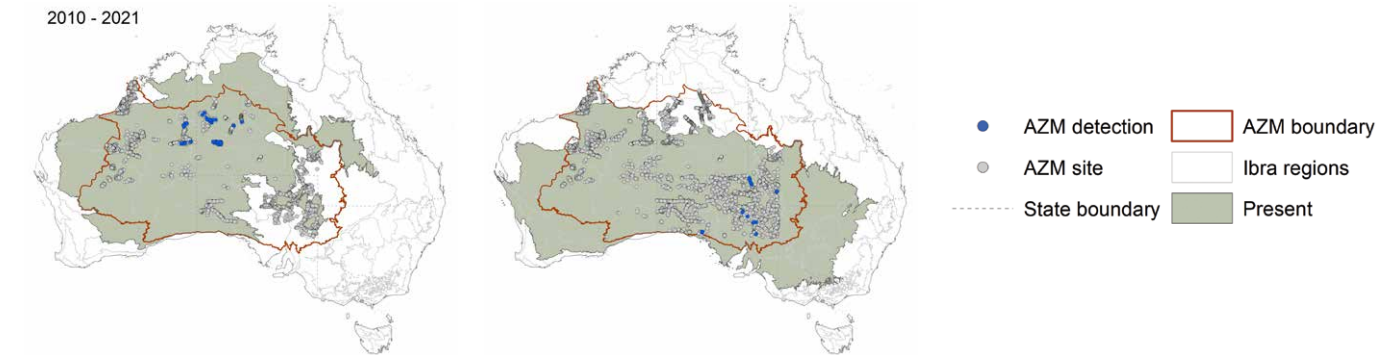
Night skink.

Arid Zone Monitoring project findings

Large skink distributions and detections

Night skinks were detected at 1% of all surveys, and desert skinks were detected at less than 1% of all surveys in the AZM dataset.

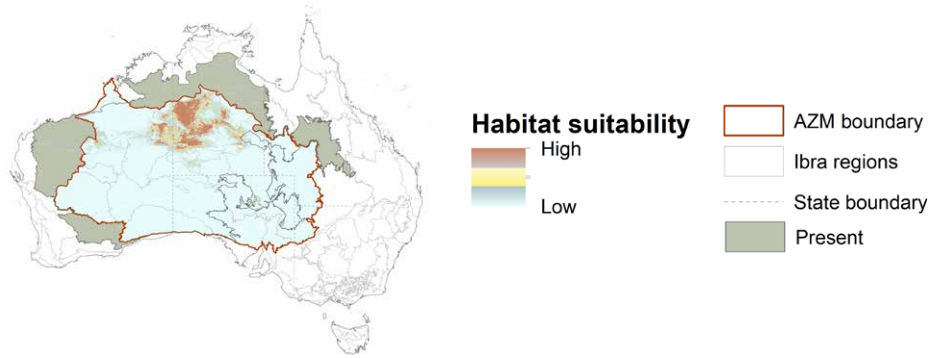
The maps summarise detections of night skinks (left) and desert skinks (right) in the AZM database. Each blue dot shows a survey site where the species was recorded. The grey dots show all the other sites that were surveyed, but where the species was not recorded. These records were made by Indigenous Ranger groups, land councils, NGOs, government agencies and university researchers. The information about the overall distribution in the map background is based on information collected by IUCN[1].



The maps above are based on 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 over the past 40 years that have not yet been shared. If you see 'gaps' in the maps that you could fill by sharing your data, please let us know.

Night skink habitat suitability

The species distribution model can tell us about where the night skink is 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 night skinks prefer to inhabit in northern areas of the arid zone that have moderate elevation (>300 m) and stable, warm temperatures. There were not enough records in the dataset to run this modelling for desert skinks.



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).

Threatened Species Recovery Hub
National Environmental Science Programme

This project received support from the Australian Government's National Environmental Science Program.

The Arid Zone Monitoring project is a collaboration between the NESP TSR Hub and over 30 Indigenous ranger groups and Indigenous organisations, 8 NGOs and NRM groups, 5 government agencies institutions, and many individual researchers and consultants. The project has gathered track and sign data from across Australia's deserts, using it to map the distributions of desert species and their threats. The national database includes almost 50,000 species presence records from over 5300 unique sites and almost 15,000 site visits, over the period from 1982 to 2020. The project area was defined by using IBRA subregional boundaries - the project boundary captures Australia's desert subregions where track and sign-based surveys are commonly used. The project showcases the collective work carried out by all groups working across the arid zone, and lays the groundwork for creating ongoing, national-scale monitoring for desert wildlife.

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