

Arid Zone Monitoring Species Profile

Invertebrates

Animal Description

Many types of invertebrates live in the deserts. In Australia, it is thought that around 300,000 of invertebrates are found on land, but there are many species still to be described¹. This profile shows examples of more commonly seen invertebrate tracks, to help trackers tell them apart from vertebrate tracks. If you can see invertebrate tracks clearly during your survey, it probably means the tracking conditions are very good.

Invertebrates and their signs (diggings and tracks)



Pyrgomorph grasshopper.



Giant crested grasshopper.



Image: Katherine Moseby

Grasshopper tracks (arrow shows direction of travel). Some grasshoppers bury themselves in the sand just below the surface. This produces a distinctive mark that can sometimes be mistaken for a mammal foot imprint. The eyes and antennae are just visible above the surface.



Image: Parks Victoria

Antlion larvae.



Image: Michael Barritt and Karen May

Antlion larvae pits. The antlions bury themselves at the bottom of the pit and wait for small insects to fall in. Antlions leave a narrow trail in the sand when moving outside their pits.



Image: Jean and Fred (Flickr)

Mole cricket.



Image: Jonathan A Todd



Image: Jonathan A Todd

Mole-cricket burrowings can be mistaken for signs of marsupial moles, as they can also burrow close to the surface. The size (width) of the burrow may help tell which animal made the sign - smaller width burrows are most commonly made by mole crickets.



Image: J. Scofield

Beetle tracks (arrow shows which way it is going). Beetles leave regular 'railway' track imprints from the legs on either side of the body.



Image: Cecilia Temperli

Beetle track (arrow shows which way it is going).



Image: Cecilia Temperli

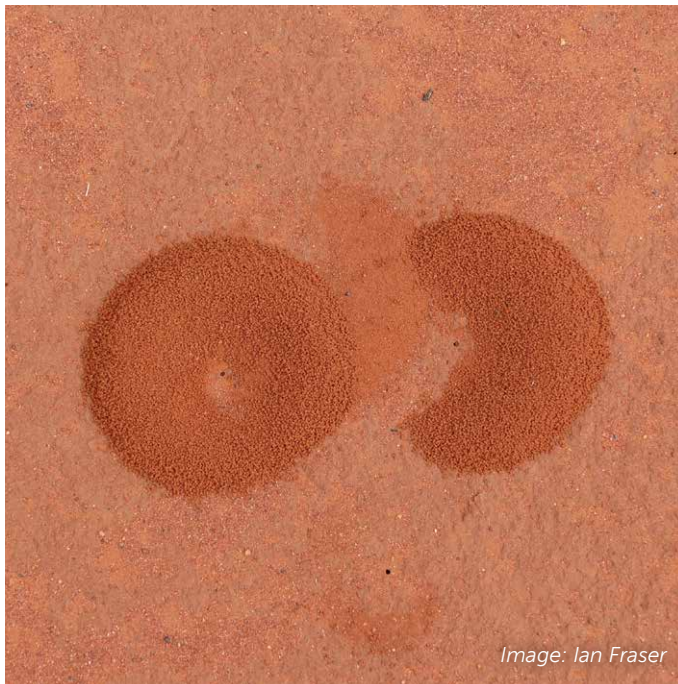
Ant track (arrow shows which way it is going).



Grub track (arrow shows which way it is going).



Ant nests.



Ant nests.



Scorpion digging and burrow.

References

¹ Key to Australian Freshwater and Terrestrial Invertebrates.

<https://keys.lucidcentral.org/keys/v3/TFI/content/Introduction%20page.html>. Accessed October 2021.

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.

Cite this publication as NESP Threatened Species Recovery Hub, 2021. Arid Zone Monitoring Species Profile: Invertebrates, Project 3.2.5 findings factsheet.