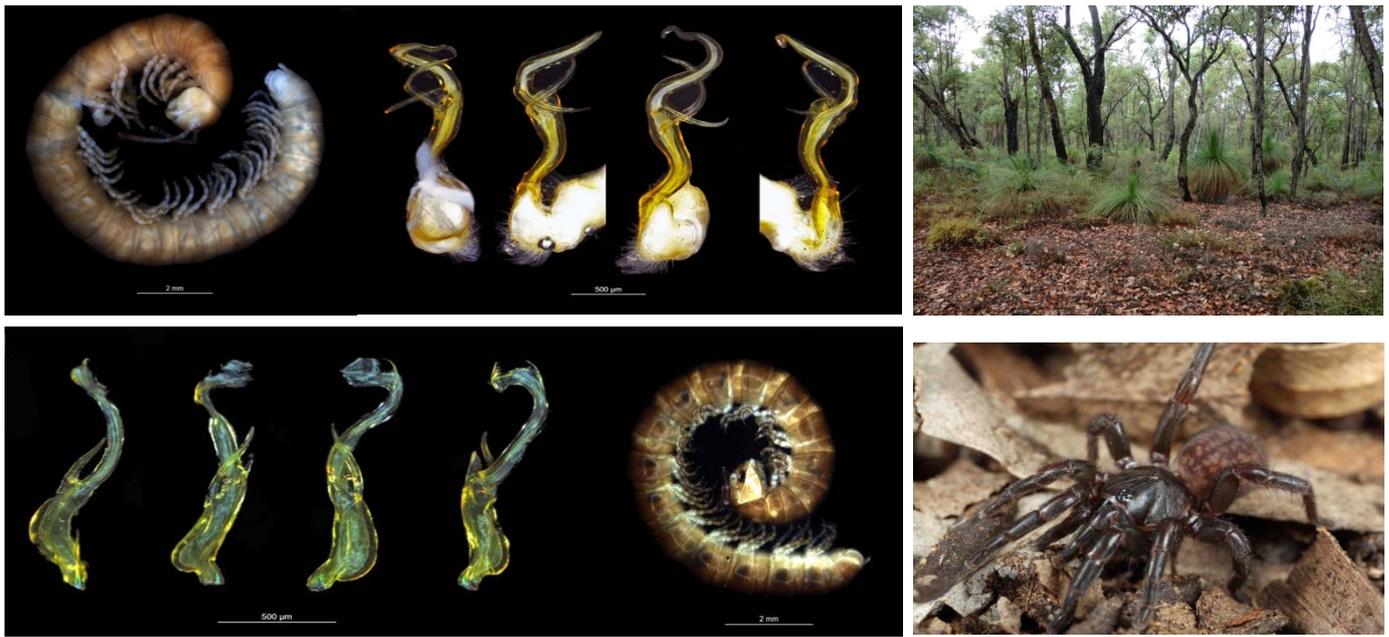


Worsley Alumina Primary Bauxite Area Expansion Project

Strategen (on behalf of BHP Billiton Worsley)



CLIENT:

Strategen Environmental Consultants on behalf of BHP Billiton Worsley Pty Ltd

LOCATION:

Boddington, Peel region

SERVICES:

- Desktop review
- Two-season, level 2 short-range endemic invertebrate fauna survey
- Taxonomic identification

KEY ACHIEVEMENTS:

- Compliance with Biodiversity and Forest Management Plan
- Comprehensive sampling through seasonal variation (spring and autumn)
- Identification of three new millipedes
- Management recommendations for impact mitigation
- Sufficient regional data collected to demonstrate low impacts to SRE fauna

Phoenix undertook a two-season short-range endemic (SRE) invertebrate fauna survey for BHP Billiton Worsley in the Primary Bauxite Area (PBA) of the Boddington Bauxite Mine. Located in expanses of Jarrah forest where little surveying had previously been completed, the survey provided the most comprehensive records of invertebrates to date.

As part of compliance with a Biodiversity and Forest Management Plan, sampling on a seasonal basis was required. The study area encompassed forest blocks with a 5km buffer of the PBA as well as regional blocks outside the PBA within the Mooradung Nature Reserve.

Dieback contamination is mapped in the regional area of the project, strict quarantine regulations were required especially within and around the Mooradung Nature Reserve.

Six *Antichiropus* millipedes were recorded, five of which were SREs, including two previously unknown species *Antichiropus* 'marradong' and *Antichiropus* 'mt saddleback 2'. A third new species, 'Hesperisiphon' 'mt saddleback' was also identified. All three of the new species were recorded in areas of non-mining, providing certainty that none of the species would be significantly impacted by the project.

Two new trapdoor spiders were also recorded, *Aname* 'MYG242' and *Teyl* 'MYG241'. These spiders were also located in areas outside of the mining impact and determined to be not at risk from the project.

With the identification of regional records of SRE species from within the project area, the development of the PBA expansion can continue on the basis that there is now sufficient certainty that SRE fauna will not be impacted by the project.



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