Wonmunna Iron Ore Project

Rico Resources (now Ascot Resources)



CLIENT:

Rico Resources Limited

LOCATION:

Wonmunna, central Pilbara

SERVICES:

- Level 2 short-range endemic, subterranean and vertebrate fauna surveys
- Environmental impact assessment and development of mitigation and management strategies

KEY ACHIEVEMENTS:

- Comprehensive sampling regime for terrestrial and subterranean fauna over two phases
- Several new invertebrate species discovered, with one species formally described by Phoenix
- Strategically designed subterranean sampling plan to maximise data collection in a geologically fragmented landscape
- Avoidance and mitigation strategies developed to protect high value habitats

Phoenix undertook a comprehensive suite of terrestrial fauna surveys to support the environmental impact assessment of the Wonmunna Iron Ore Project, located on the highly productive, regionally important Weeli Wolli Creek.

Located north-west of Newman, the project comprised several proposed pits over three distinct deposits of Marra Mamba formation and was dissected by a gorge along Weeli Wolli Creek. Comprehensive two-phase Level 2 short-range endemic (SRE), subterranean and vertebrate fauna surveys were undertaken for the project in 2010 and 2011. Targeted sampling (trapping, camera trapping and nocturnal searches) was conducted for Northern Quoll, Pilbara Leaf-nosed Bat and Pilbara Olive Python).

Due to the high likelihood of endemism in the invertebrate fauna at some sites, a DNA barcoding program was initiated to determine the status of fauna collected. The program identified a new species of millipede in the genus *Antichiropus*. Phoenix also collected and formally described a new species of trap-door spider - *Missulena langlandsi*.

New subterranean species were recorded in the surveys, with the collections suggesting some endemism between the discrete geological formations. Additional drilling enabled sampling and collection of additional records outside of proposed impact areas.

Vertebrate fauna values were well defined during the surveys, and the creekline and associated riparian habitats were identified as high value habitat for vertebrate fauna.

Recognising the values of the creek and adjacent habitats for fauna, Phoenix worked with the client to develop an exclusion buffer to minimise project impacts without compromising project viability.

