

Mine Rehabilitation Monitoring

Project: Murrin Murrin

Location: Leonora, Western Australia

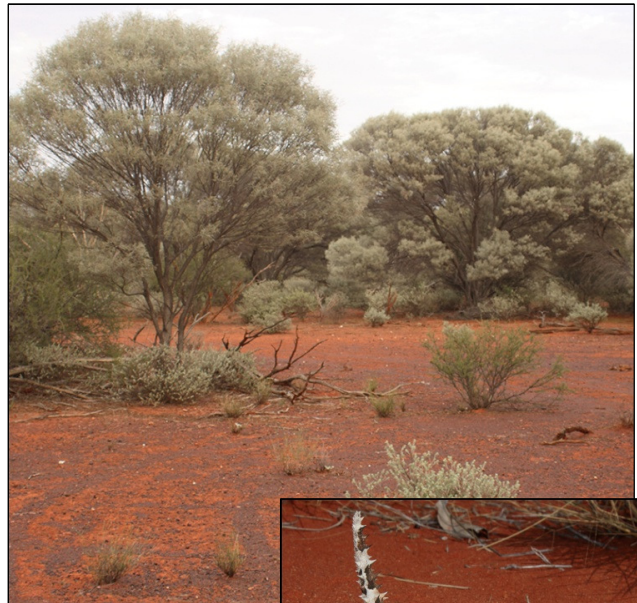
Project Goals

Murrin Murrin is open-cut metalliferous mine. Rehabilitation work following mining includes land contour works and revegetation. The mine wished to understand the effect of remedial works on facilitating fauna colonisation, and if this could be improved.

Project Actions

EcoSmart Ecology staff liaised with the mines environment department to discuss their requirements and goals. This process highlighted that the study should not only aim to undertake monitoring research, but also improve the profile of the mines rehabilitation works.

A methodology was suggested which focused on comparing fauna abundance and diversity within rehabilitated lands to fauna communities in nearby habitats. The study had to consider natural fluctuations within vertebrate communities, which can be substantial in arid environments where rainfall can determine activity and abundance. The surveys also included an interpretive component, where the survey team would set aside time to show and



discuss examples of their days capture. Members of the mines environment team were able to assist in survey activities as they wished.

Project Outcomes

The study found that species tolerant of simple environments quickly moved into rehabilitated areas, often these were exotic or pest species. Over time, these species were replaced by natives with more complex habitat requirements. The documented succession showed that fauna communities within rehabilitated land was trending toward a community dominated by native species.

Recommendations were provided to expatiate the succession process.

The monitoring contributed to the Mine in winning the Golden Gecko Award in 2008. The award recognises excellence in rehabilitation

