Biodiversity Survey Node

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The Western Australian Biodiversity SCIENCE INSTITUTE

Objective

To develop a thorough and robust understanding of the full range of **species** and **ecological communities** in Western Australia, their **geographic distribution**, and their health both now and into the future.

Focus Areas:

1. Standards, identification tools and information systems
2. Identify and trial new technologies
3. Understanding pattern and significance

Standards, identification tools and information systems

- **eFlora of the Pilbara** – single electronic resource to identify plant species
- **End-users**: environmental consultants, conservation managers, industry, general community
- **Outcome**: capacity to reliably and efficiently identify plant species ➡ timely provision of supporting information for environmental impact assessments ➡ improve the efficiency of decisions regarding conservation and land management
- **Key deliverable**: freely available online website
- Prospectus under preparation
- WABSI to identify funding opportunities

Identify and trial new technologies

- **Molecular genetic techniques to identify dispersal corridors in the Pilbara** - identified through industry engagement workshops
- **End-users**: conservation managers, industry and regulators
- **Outcome**: identify priority areas for targeted conservation
- **Key deliverables**: species habitat suitability maps, single and multi-species refugia and landscape connectivity maps, systematic conservation prioritisation maps
- WABSI facilitated ARC Linkage Grant and identified research and industry partners - submitted

Understanding pattern and significance

- **Development of a collaborative subterranean fauna research program for WA**
- **End-users:** industry, environmental consultants, conservation managers, regulators
- **Outcomes**:
  - Greater certainty in decision-making with regard to the impacts of developments on subterranean fauna
  - Increased efficiency of environmental impact assessments
- **WABSI** facilitated stakeholder and expert workshops to identify knowledge gaps, and to develop a programme of research to address knowledge gaps
- **WABSI** to prepare a Research Program Plan and prospectus to seek funds

Critical research areas for subterranean fauna research

1. Capture and consolidation of current and future data
2. Species delineation and new technologies for detection
3. Best practice sampling and survey protocols
4. Improved understanding of biotic and abiotic habitat requirements above and below ground to inform predictive habitat assessment modelling
5. Response to impacts and resilience to disturbance

The Western Australian Biodiversity Science Institute

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PROUDLY SUPPORTED BY:

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