



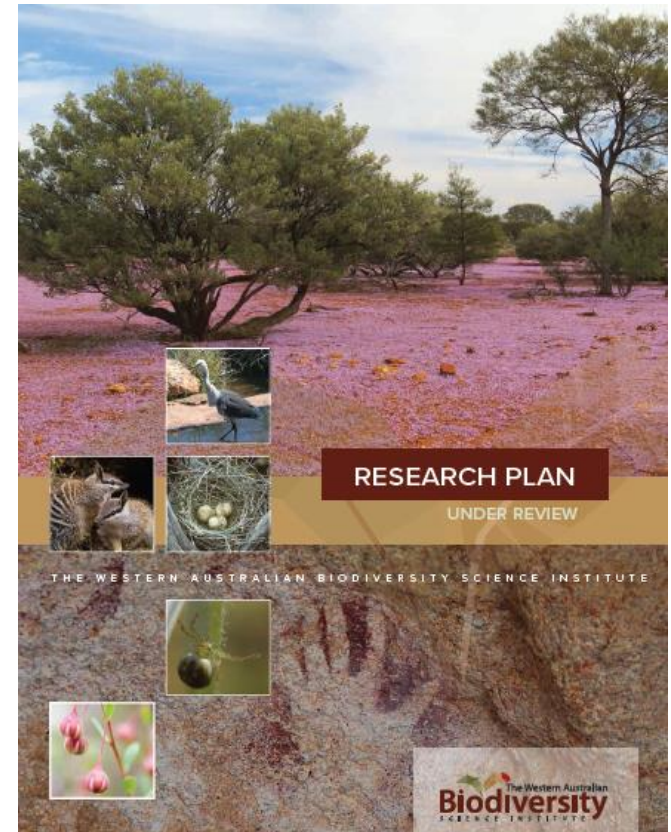
Photo thanks to Dr Ashley Sparrow

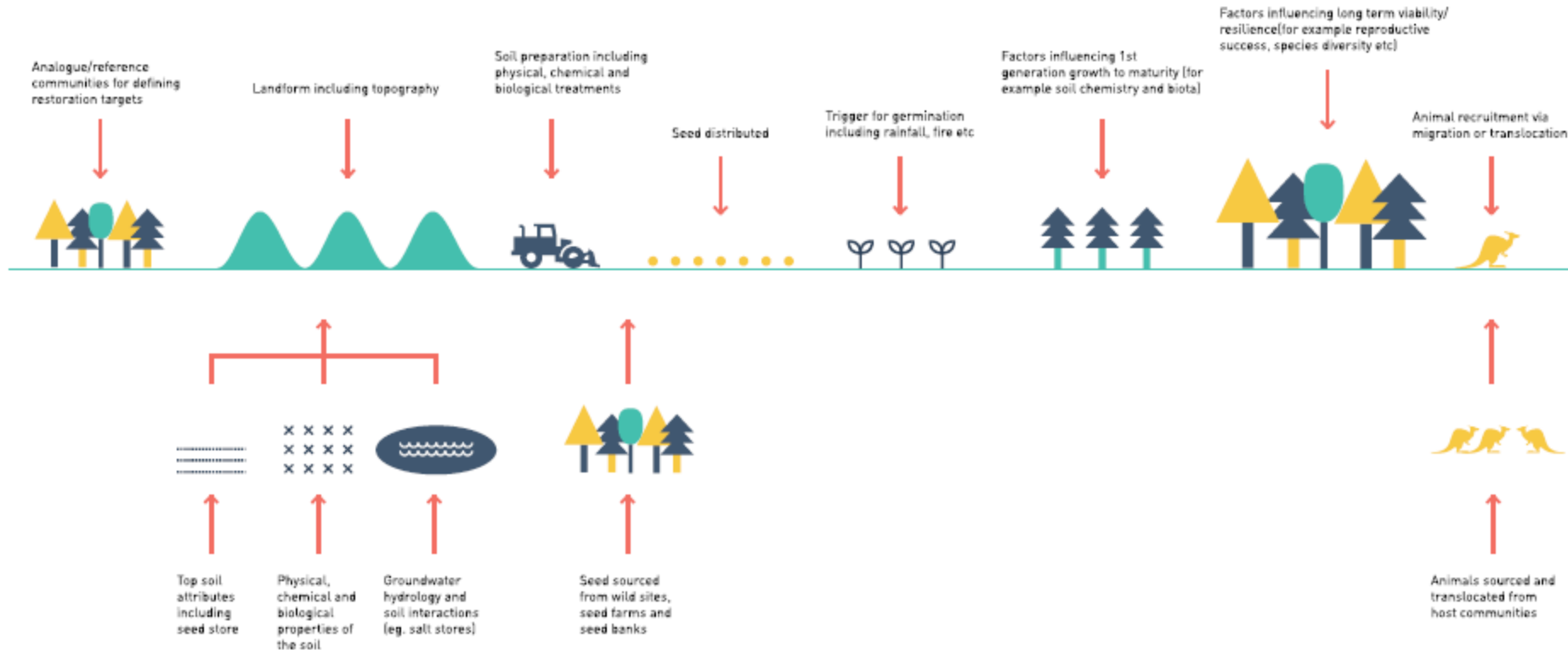
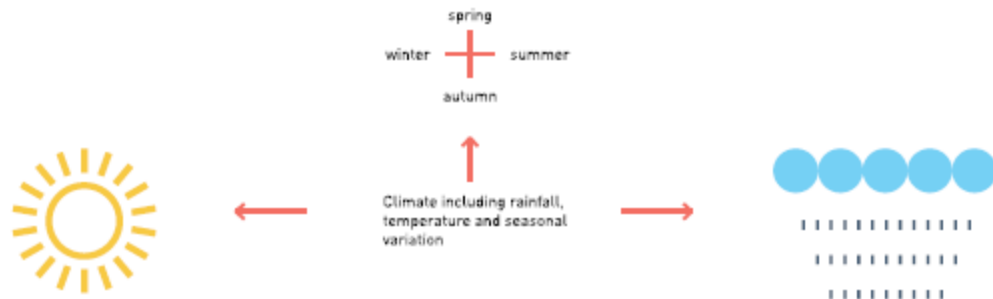
# Restoration and Ex-Situ Conservation

**Guy Boggs**  
26/07/2017

# WABSI Restoration Node Priorities

- Develop and facilitate the adoption of cost effective and scalable strategies and tools for the restoration and reconstruction of Western Australian ecosystems and the reintroduction of threatened plants and animals.
  - Defining Criteria for Restoration Success
  - Restoration Technologies
  - Criteria for Species Reintroduction
  - Reintroduction Technologies
- *Priorities shaped by End Users (sector based) and Researchers*





# Mining

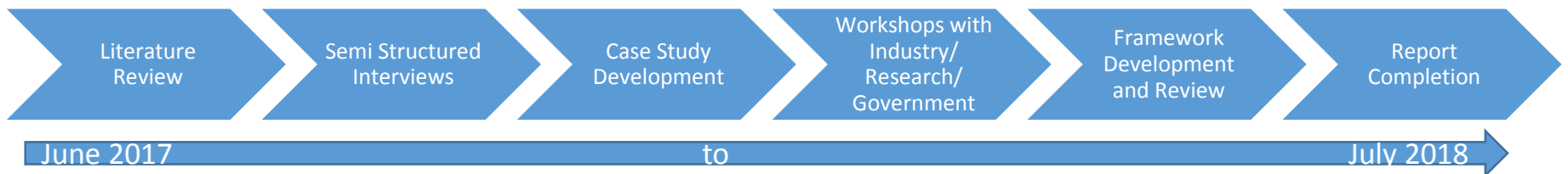
- **Erosion Rates Risk Assessment:**
  - Pilbara Rehabilitation Group Initiative
  - Four Pilbara Mining Companies
  - Working with Landloch
- **BIF Research Integration**
  - Publishing Grey Literature Reports – 2 special issues
  - 2 Review Papers:
    - BIF Species Distribution, Genetics & Ecology
    - Restoring Ecosystems in Rocky Landscapes
- **State Completion Criteria Framework**
  - Joint initiative with 8 Mining Partners, Regulators (DMP & OEPA) and WABSI Research Partners



Photo thanks to Dr Lesley Gibson

# Completion Criteria Project

- An **independent report** analysing state and international **rehabilitation research** and **informed by industry consultation** and leading experts to provide a **framework** and information for developing site-specific completion criteria and associated monitoring for Western Australian mine site closure and relinquishment.
- Key Feedback from Consultation Process
  - **End Land Use** – significant disconnect in process between end land use considerations and regulator approved/industry developed completion criteria
  - Large **variation in standard** of completion criteria and associated monitoring, and relatively poor understanding across WA geographies
  - **Imbalance** between research driven ‘ecological completion criteria’ & implementation risk profile (including relationship with other major drivers of closure criteria)
  - Outcome must include a **framework**



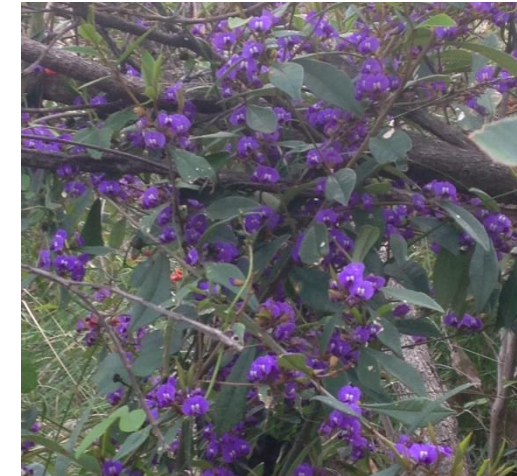
# Urban

- Rehabilitating Roe 8
  - Supporting Rehabilitating Roe 8 Working Group
  - 10 year Rehabilitation Plan in Development
  - Engaging Community in Ecosystem Restoration Processes and Outcomes
- Perth Urban Restoration Scientific Advisory Committee
  - Evolving Network of Scientists Engaged in Restoration Research
  - Social, Economic and Biophysical Research
  - Integrating across biodiversity to green infrastructure research for cumulative biodiversity outcomes
- Banksia Woodland Restoration
  - Focus on long term trajectories
  - Linking existing restoration knowledge hubs/sites



# Agricultural Landscapes

- **South West Agricultural Land Research Strategy**
  - Muresk End User Workshop (Aug 20/21<sup>st</sup>)
  - Achieving 'at-scale' restoration:
    - Landscape Planning
    - Enhancing Economic Drivers
    - Implementation
    - Outcomes assessment
- **Dongolocking Project**
  - ECU/SWCC/DPaW/GAWA project
  - Evaluating outcomes from focal species restoration > 15 years old
  - Birds as focal species, with non-target birds, mammals & invertebrate assessment
- **ARC LIEF Critical Zone Observatory**
  - Integrating above and below ground processes in cleared, restored and uncleared landscape
- **National Experimental Restoration Guidelines & Network**
  - CSIRO Initiative with DoEE
  - Identifying opportunities to link research with restoration implementation



Thank you

