



An end user's perspective on vegetation surveys



**Environmental Impact Assessment
Practitioners and botanists – why didn't we
talk sooner?**

Observations of an EIA Practitioner

- Botanists may not appreciate how important botanical reports are in the EIA process
- Botanists may not be clear on what the purpose of the surveys (**Who and Why are surveys done**)
- Botanists may not fully understand what EIA practitioners use their reports for (**What**)
- EIA practitioners may not fully understand why botanists have done what they have (**How**)



For who and why is the survey done

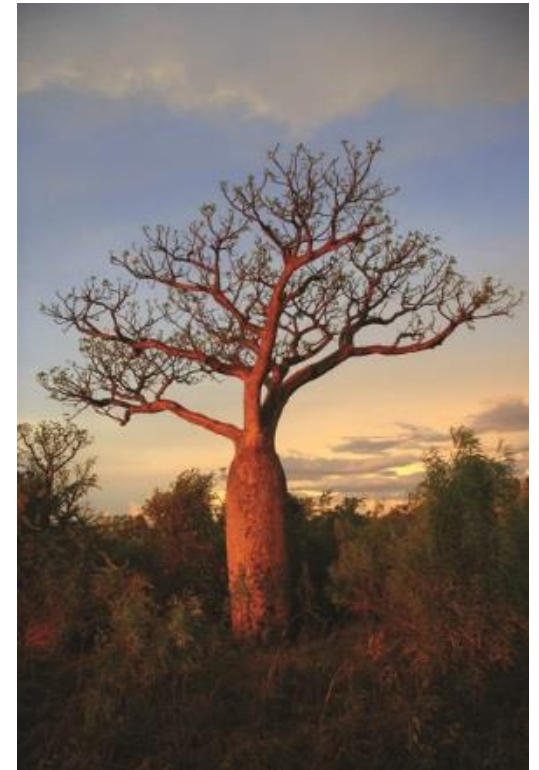
Regulators:

Technical Guidance Flora and Vegetation
Surveys for Environmental Impact Assessment
(EPA 2016):

*“.... to ensure adequate flora and vegetation
data of an appropriate standard are obtained
and used in environmental impact assessment
(EIA).”*

Relevant sections:

Methods, limitations, results



For who and why is the survey done

Clients:

- Sometime clients have a begrudging acceptance of a necessary step.
- Intrinsically valued, curious
- Usually focus on metrics (300 species, 20 communities, one Priority 1 and four Priority 3s) and the outcomes of the metrics

Relevant sections:

Executive summary, conclusion



For who and why is the survey done

EIA Practitioners:

- Vegetation community context

Relevant sections:

Results, **discussion**, conclusion (and sometimes methods)



What botanical surveys are used for

Botanists and EIA practitioners have different roles – Botanists produce ‘science’

EIA is a justified interpretation of the science.

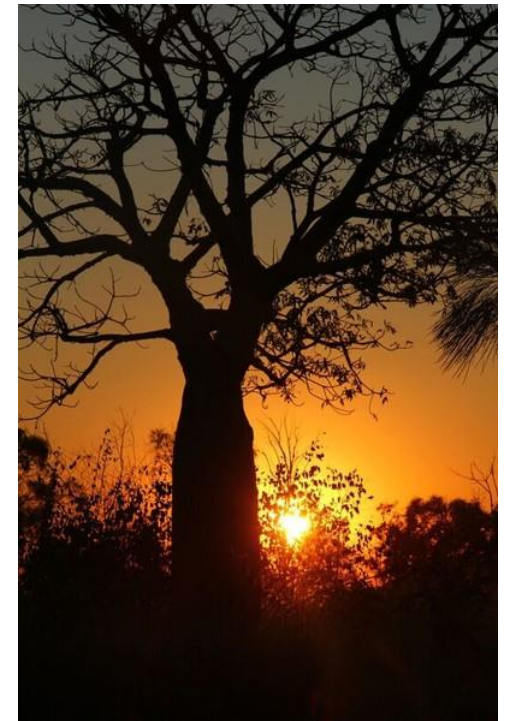
EIA practitioners need as much of science as possible - particularly the interpretation of the data (Context).

EIA starts with understanding the project



How - Survey design

- The survey design is a rich area for context
- Experience of the botanist in designing the survey is almost as important as the results; however, we often don't get to know the assumptions that went into the design of the surveys.
 - “Based on similar surveys, in this area of the Pilbara landscape is an important control for determining the likely vegetation communities” or
 - “in this area of forest a gridded survey design was used as ...”
- Should the survey area be a square? From the outset do you think that a sufficient representation of vegetation units can be made?
- Describe the ‘journey not justification’ for where changes are made to the survey design in the field



How - Landscape context

Botanists are eyes in the field - EIA practitioners rely on only what is written in the report

- What controls the presence of vegetation communities?
- How does the structure vary?
- What influence does distance to watercourses have?
- Are there differences visible in the maturity of the vegetation from fire?
- Does the surveyed vegetation communities look consistent outside the survey boundary?
- Are there any restricted areas in the landscape?



How - Reference to previous reports

- Translation between different reports is very difficult
- How does this vegetation mapping relate to previous mapping?
- Boundaries of a subsequent survey may not match but we need to explain why – has fire changed the structure?
- How does mapping relate to regional mapping, is this coarsen or detailed?
- Changes with introduction of IBSA – will it increase expectations to explain differences, will it increase work/cost?



How - Basis for determining significance of vegetation

The process used to determine significance of vegetation is just as important as the outcome of the assessment

Was it done on the basis of:

- Unusual species combinations
- Restricted
- Landscape context (watercourses)
- Priority flora
- Expert opinion



Final thoughts

EIA Practitioners can improve the EIAs we write.

To do this we need your discussion to describe your observations from the field:

- Landscape context
- Variations across site
- Similarities outside the survey area

