

Accounting for biodiversity

Emily Nicholson

Deakin University, Australia

What is biodiversity?

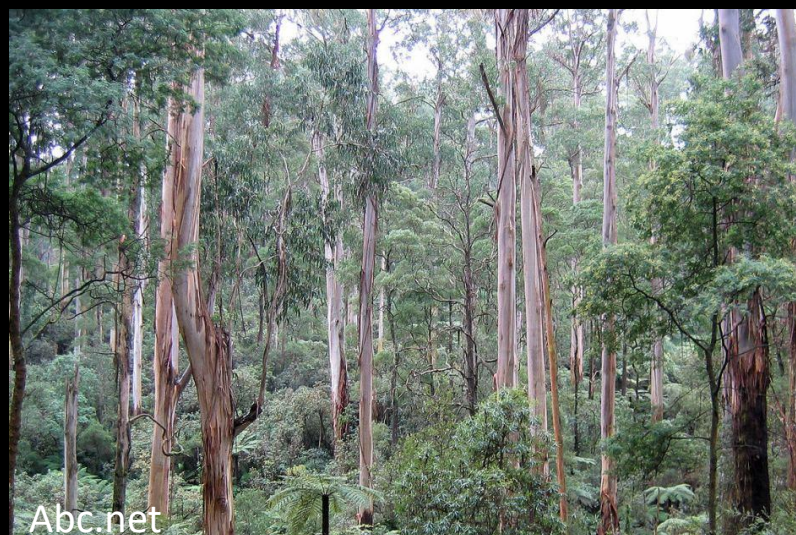
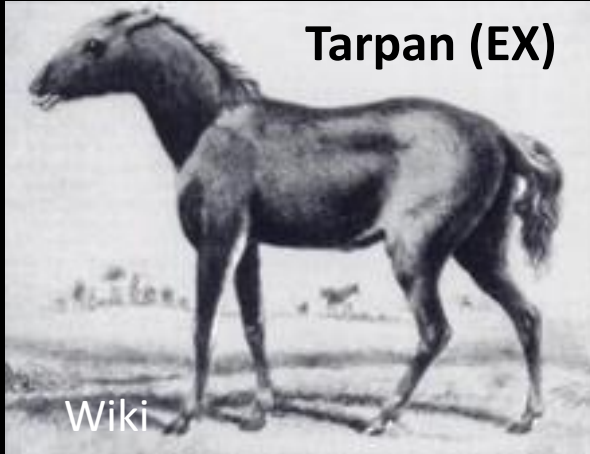
- Species richness (number of species)? for many people biodiversity means species richness (the number of species)
- Species richness is not necessarily associated with ES supply (also relationships are non-linear)*
- Multiple forms of diversity are needed
- Can result in perverse outcome that areas with (naturally) low species richness seen as not productive or valuable
- From a SEEA perspective, function probably matters as much or more, both from a species perspective & ecosystems

What is biodiversity?

- Terms: use species-based indicators for species-based indicators, not biodiversity indicators; be as specific as possible
- How to avoid double counting in species & ecosystem accounts?
 - Species metrics often used in ecosystem condition accounts
 - Thus species & ecosystems deeply linked

Natural, semi-natural & anthropogenic biodiversity

In ecosystems versus species & their accounting – analogous?

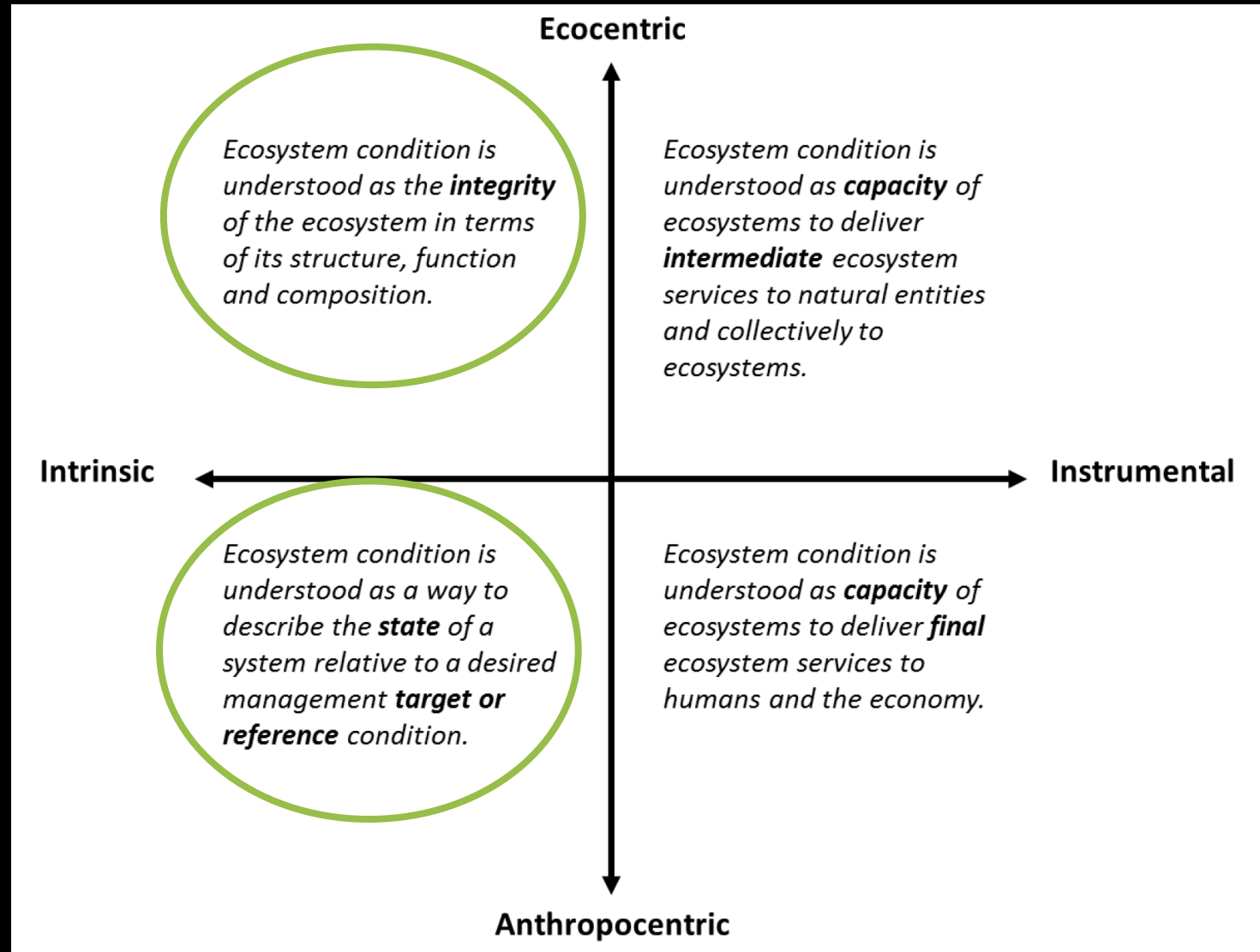


Dealing with loss: ecosystem collapse & species extinction

- Non-marginal change
- Local (e.g. national, regional) & global
- Local populations or patches, versus global distribution/population
- Scale – temporal & spatial

Decision-making

- Biodiversity value
- Value for conservation?
- Service? Asset? Benefit?



Potential questions for discussion

- What is meant by the term “biodiversity”? how should it be used in the revised SEEA EEA?
- How can the core ecosystem accounts (extent, condition, supply and use tables, monetary asset accounts) best support decision making with respect to biodiversity?
- How can species population accounts best support decision making with respect to biodiversity and the compilation of core ecosystem accounts?
- Assuming core ecosystem accounts and species population accounts are compiled what information is missing to support biodiversity assessments?
- Is the value of biodiversity a meaningful measurement objective? If so, how can this be framed in an accounting context?
- What is an appropriate framing of the link between biodiversity and ecosystem services?