Accounting for biodiversity

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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

*Cardinale et al. (2012) Nature
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?

Tarpan (EX)

Przewalski's Horse (EN)

Wiki

Moehlman, IUCN Red list

quora

Wiki

Moehlman, IUCN Red list

quora

Abc.net

Abc.net

Abc.net

David LaHart
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?