

ACCOUNTING FOR BIODIVERSITY

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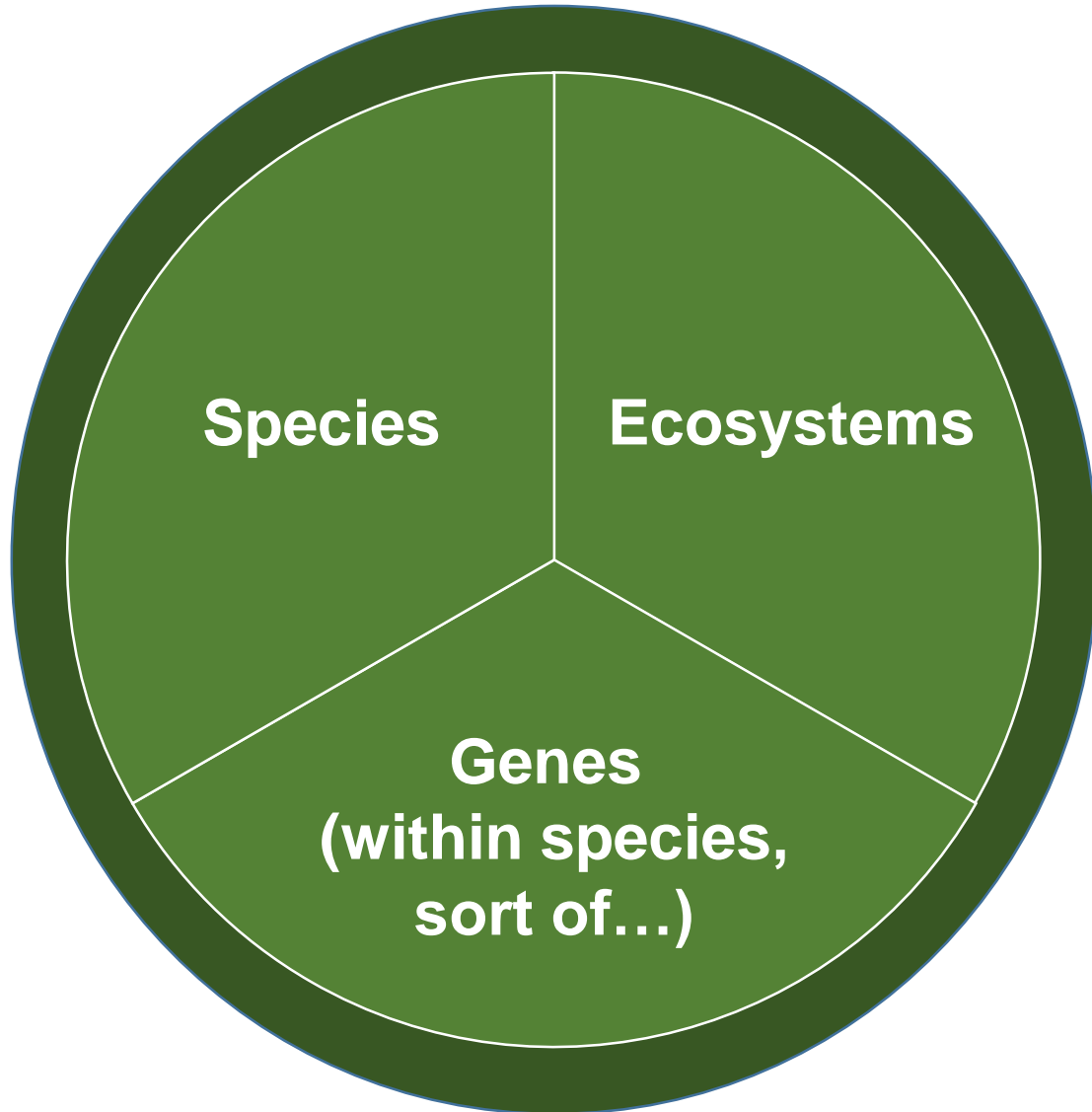
Accounting for Biodiversity

- **Objective:** How to best use the SEEA EA (and extend it) to inform decision-making that delivers better outcomes for biodiversity and people?
- **Coherence:** Important that the SEEA EA is implemented in coordination with those responsible for national biodiversity assessment (for mainstreaming and generating the right biodiversity indicators – See section 13.3.4)

SEEA EA adopts CBD Definition.

“Biological diversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems”

Components of biodiversity



Accounting for Biodiversity to:

- Assess 'stocks' of these different components
- Derive biodiversity indicators to link to ecosystem services
- Inform land use planning and opportunity costs for biodiversity protection and enhancement
- Inform sustainable use of biodiversity / ecosystem services
- Guide strategic investment in biodiversity
- AND.....Assess variability (CBD)
 - Diversity of species within Ecosystem Assets
 - Diversity of different components across Ecosystem Assets

Using SEEA accounts to assess biodiversity

Account	Indicator / Aggregate	Relevance to supporting decision-making
Extent	Extent of Ecosystems	Trends in the extent of ecosystems important for biodiversity can be used to infer habitat loss and implications for species
Condition	Biotic characteristic indicators	Distinguishing EAs of higher biodiversity value. For example, with high values for species-based indicators. Identify where biodiversity is threatened, based on indicators of poor condition (e.g., invasive species abundance).
Condition	Abiotic characteristic indicators	Track where pressures on biodiversity may be manifesting (e.g., where pollutant concentrations are increasing).
Services	Physical Supply and Use	Aggregates for provisioning services can identify where overexploitation of biodiversity is occurring (e.g., where sustainable yields are being exceeded).

Using SEEA accounts to assess biodiversity

- Indicators for ecosystem resilience, insurance, option, existence and bequest values
 - Using indicators from the SEEA Accounts to mainstream important aspects of biodiversity that are not well-reflected in ecosystem services accounts into decision-making
- Combined presentations
 - Using information from multiple SEEA Accounts to evaluate trade-offs and synergies involving biodiversity (e.g., presenting opportunity costs of not undertaking economic activities alongside trends in ecosystems of high biodiversity importance)

Species Accounts

- Provide a more coherent picture on different components of biodiversity
- Measure changes in species stocks (e.g., abundance), distribution or status / extinction risk over an accounting period:
 - Understand sustainability of provisioning and regulating ecosystem services flows (e.g., fish provisioning, pollination)
 - Provide indicators for cultural ecosystem services that are challenging to measure (e.g., with respect to conservation associated non-use values)
 - Potentially inform on ecosystem condition
- Development of Species Accounts
 - Proposed these are compiled at flexible scales (e.g., for EAAs or ETs within EAAs)
 - Further proposals for compilation are briefly provided

Adaptations of accounts

- Highlights the importance of genetic diversity
 - Some tentative proposals for using Species Accounts for understanding within species diversity
- Highlights CBD emphasis on variability (or diversity)
 - Ecosystem Condition Account for species diversity within Ecosystem Assets (i.e., local diversity)
 - There is no current account for diversity, specifically composition variation, across / between Ecosystem Assets and species assemblages (i.e., at EAA or landscape scale)
 - Important for maintaining or investing in multifunctional and resilient landscapes
 - A supporting note is being drafted on approaches for compiling ecosystem and species diversity accounts for whole EEAs using Ecosystem Asset and Species Accounts

Supporting note: (Bio)diversity Accounts

