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Accounting for biodiversity: Options for incorporating biodiversity in the SEEA

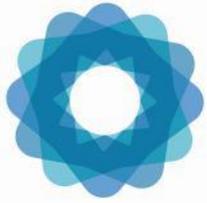
Contributing authors: Carl Obst (UNSD consultant), Tom Brooks (IUCN)

2019 Forum of Experts on SEEA Experimental Ecosystem Accounting

Glen Cove, NY, 26-27 June 2019



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Context for the paper



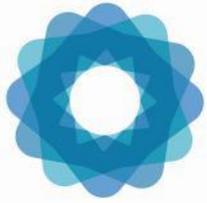
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State of play

- Explicitly covered exclusively in the SEEA EEA
 - > Chapter 2: Definitions of ecosystems and biodiversity from CBD
 - > Chapter 4: Biodiversity accounts focused on species populations (leading input from PBL (mean species abundance) and Norwegian Nature Index)
- Since 2013 increasing understanding of the connection and potential
 - > Leading work of UNEP-WCMC within the context of SEEA EEA work
 - > More broadly, now wider acknowledgement of the importance of biodiversity including within the natural capital community

Aligning understanding

- In 6 years since 2013, understandings of the connection between SEEA EEA and biodiversity have proceeded at different rates
 - > UNEP-WCMC work and UNSD project country work
 - > SEEA EEA Technical Recommendations and thematic accounts
 - > Ongoing advances in biodiversity measurement
- Paper developed in the context of reaching common understanding of the potential for the SEEA to support discussion of biodiversity policy and potential for biodiversity measurement to support SEEA
 - > Small initial meeting in Paris between UNSD and IUCN in Nov 2018
 - > Aim to use the SEEA EEA revision process as a catalyst



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Key findings



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1. “Types” of biodiversity

- Need to recognise that ecosystem, species and genetic diversity are not nested; e.g. species are not “within” ecosystems
- Recognise three levels of ecological organisation
- Implications
 - > A lot more care is needed with language and the challenge of reaching common understanding of text
 - > Consider how accounting can be applied at each level
 - Ecosystem level: Accounting going well
 - Species level: Accounting incomplete
 - Genetic level: Limited potential at present

2. Many SEEA accounts are relevant

- Relevant accounts include
 - > All ecosystem accounts (extent, condition, services)
 - > Thematic: species population accounts; protected area accounts
 - > SEEA Central Framework
 - Individual resource accounts (timber, fish, other biological res.)
 - Environmental flows: pressures on biodiversity
 - Environmental transactions: policy responses wrt biodiversity
- Implications
 - > No single biodiversity account => “Accounting for biodiversity”
 - > Consider role of accounting in supporting organisation of data
 - > Consider role of accounts to support decision making, indicators and biodiversity narrative

3. Ongoing conceptual discussion

- Terminology and definitions requires ongoing clarification
- Links between biodiversity and ecosystems
 - > Issues of scale: alpha, beta and gamma diversity
 - > Use of biodiversity metrics in measuring ecosystem condition, including reference levels
 - > Accounting for ecosystem conversions (changes from one ET to another)
- Potential for species accounting as a complement to ecosystem accounting
 - > Accounts for species extent (range?), condition (abundance?), services and values
- Linking biodiversity, ecosystem services and valuation, e.g. is biodiversity an asset?

Potential accounts for biodiversity

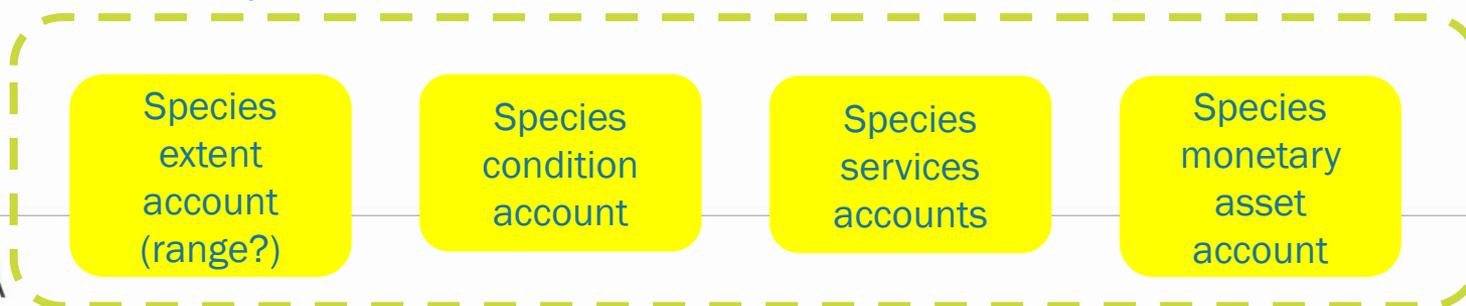
Core set of ecosystem accounts



Thematic / complementary accounts

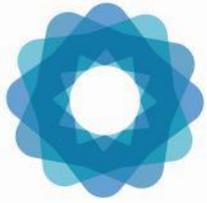


Potential species accounts



4. Keep talking

- Focus on common aims and the need for the science to be communicated coherently and consistently
- Understand the information requirements for biodiversity policy and decision making
- Look to ways in which statistical and accounting approaches can support further development of biodiversity measurement
- Look to ways in which ongoing advances in biodiversity measurement can be applied in a SEEA context at international, national and sub-national levels



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Thank you



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