Issue paper on biodiversity accounts and Indices- some comments on the difference between the Australian and Norwegian approach.

UN Committee of Experts on Environmental Accounting

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Purpose: Overview of state and trends of biodiversity

• Measure state and trends of biodiversity in natural ecosystems, including the cultural landscape.

• Reflect threats to biodiversity: The combined effect of all pressure.

• Combines current biodiversity knowledge in a common conceptual framework (expert-judgements and monitoring data).

• Measurement tool for government policy and management
5 national research institutes
Statistics Norway
125 Researchers
Internet based data-collection
309 indicators

\[
NI_t = \sum_{ijk} S_{ijkt} W_{ijkt}
\]

S = State  
W = Weighted at trophical level  
t = time  
i = species  
j = ecosystem  
k = municipality, area
Several scaling models: several way of using the reference condition.

Reference state ist the ”ideal’ state for the ecosystem. Model decided by each expert.
% change from 1990 to 2010

- Open lowland: -15%
- Forests: -10%
- Marsh: -5%
- Coast bottom: 0%
- Coast pelagic: 5%
- Mountain: 10%

Sea-bottom: 5%
Sea pelagic: 10%
Fresh-water: 15%
State of biodiversity: Norway and Netherlands

Naturindeks for Norge 2010

Natural Capital Index for Nederland 2002
Some differences between the Australian and Norwegian approach.

• Administrative units - ecosystem within these units
• Trophic levels - All levels equally represented
• Max, min and optimal levels
• Scaleable from local to regional to national level, thematic indices.
• Systematic use of expert judgements
• Systematic information about uncertainty in estimates (25 and 75 percentiles)
• Marine areas included
• THE INDICATORS WILL CHANGE WHEN USED FOR POLICY
Nature Index

General framework, statistical method and data collection for Norway

Grégory Certain
Olav Skarpaas

\[ NI_t = \sum_{ijk} S_{ijk} W_{ijk} \]