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

Per Arild Garnåsjordet
London, 5-7 December 2011
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

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

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 is the "ideal" state for the ecosystem. Model decided by each expert.
State of biodiversity: Norway and Netherlands

Naturindeks for Norge 2010

Ut til 1 nautisk mil

Natural Capital Index for Nederland 2002

Ut til 12 nautisk mil
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
NINA Report 542

Nature Index
General framework, statistical method and data collection for Norway
Grégoire Certain
Olav Skarpaas

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