



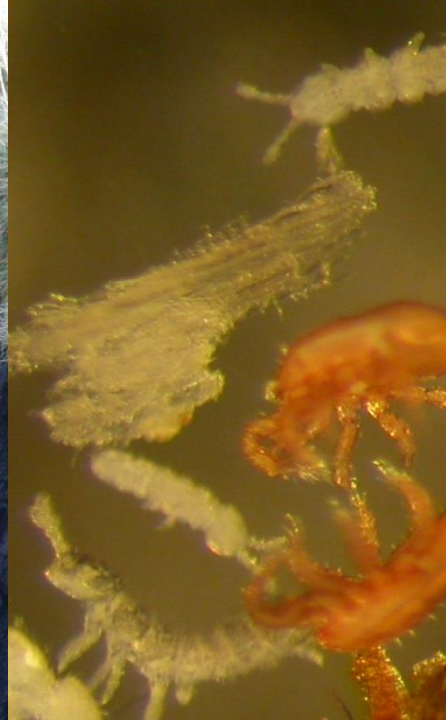
VALUING NATURE

Valuing Soil Change in Natural Capital Assessments

David A. Robinson

CEH Bangor

Why Soils?



- Soils support food, feed and fibre production
- Regulate climate, store carbon
- Filter and recycle, water, nutrients and waste
- Regulate floods, droughts, heatwaves, frost penetration
- Habitat and genetic resource, e.g. Antibiotic extraction.
- **They are vulnerable to degradation from pollution, land use and climate change!**

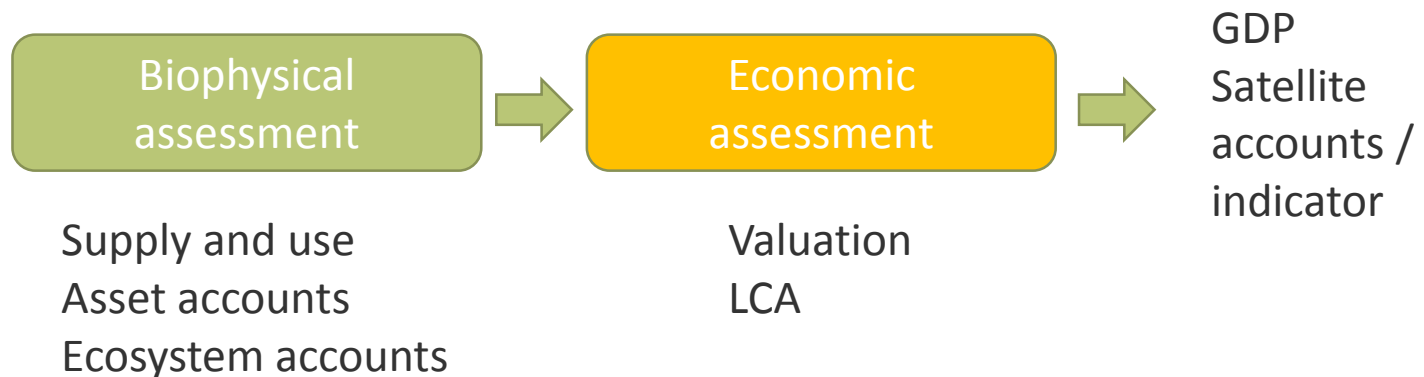
My Interest

- Soil Scientist
- Perception in soil community that soils are under recognised and under appreciated and that valuation, non-monetary, or monetary, may help improve resource visibility and use.
- Contributed 11 papers and 3 book chapters on NC & ecosystem services
- Robinson, D.A., I. Fraser, E.J. Dominati, B. Davíðsdóttir, J.O.G. Jónsson, L. Jones, S.B. Jones, M. Tuller, I. Lebron, K.L. Bristow, D.M. Souza, S. Banwart, B.E. Clothier. 2014. On the Value of Soil Resources in the Context of Natural Capital and Ecosystem Service Delivery. *Soil Sci. Soc Am J.* 78 (3): 685-700.
- Recently co-led the ecosystem services component of the UN World Soil Resources Report for the Intergovernmental Technical Panel on Soils
- I have no training in economics, and would like to learn, I like to synthesize and integrate across disciplines.

Placement

- Bangor Team:
 - James Gibbons - Environmental statistician / economics
 - David Styles - Life cycle analysis
 - Neil Hockley - Ecological economist

UN System of Environmental Economic accounting



- Aspiration is to gain an overview of the economic element of Natural Capital accounting
- Outcome, by the end we will

Community interaction and outputs

- Aspiration, is to gain an overview of the economic element of Natural Capital accounting
- Output, draft peer reviewed article with policy, science and economics/accounting that responds to this Nature correspondence:
- “Integrating information on soil resources with other measures of natural capital and economic activity remains one of the least developed areas of the United Nations System of Environmental Economic Accounting (SEEA).” Obst, Nature, 2015
- Outcome, by the end we will have a road map for moving forward with soil accounting.