

What On Earth Are Cultural Ecosystem Services?

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There are many different definitions of cultural ecosystem services (CES) floating around. Wessex-BESS WP5 have reviewed some of the definitions on offer and decided something new and improved was needed to guide our research on the intensive arable- lowland calcareous grassland biodiversity gradient. Different CES definitions actually give multiple perspectives on where are CES are located. They have been viewed as a benefit (residing in individuals), as a contribution to benefits, or as an environmental setting (located externally):

‘nonmaterial benefits obtained from ecosystems’ (MA, 2005).

“...ecosystems’ contribution to the nonmaterial benefits (e.g. capabilities and experiences) that arise from human-ecosystem relationships” (Natural Capital Project, 2011).

“...environmental settings that give rise to the cultural goods and benefits that people obtain from ecosystems” (UK NEA, 2011).

This conceptual discord can be challenging for communicating and designing research. The view of CES as a benefit doesn’t correspond with definitions attributed to other ecosystem services. This means CES is unaligned with other ecosystem services in the typology. Nonmateriality is based on Cartesian dualism- a rather outdated philosophical perspective, and one not supported by current evidence that shows exposure to natural environments has tangible biophysical effects.

Recognising that ecosystems make a contribution to experience (rather than being a sole source of experience) is important since i) people are shaped by natural and social processes which occur outside ecosystem boundaries and time frames, and ii) experience is subjective. The treatment of non-ecosystem contributions is tricky however, as really depends on whether we see humans as part of the ecosystem or not. It is an area of debate which continues to compound CES research progress. A simple-to-apply definition should aim to refine and exclude this issue.

The UK National Ecosystem Assessment (UKNEA) avoided these conceptual and commensurability problems by taking a spatial, place based approach. The definition of CES as setting (i.e. something located in the external environment) is useful as it provides an objective, verifiable, and bounded phenomena that is measurable, and which aligns with other ecosystem services. The UKNEA distinguishes between final and intermediate ecosystem services. Final CES are ecosystem outputs which contribute directly to cultural, psycho-social and health benefits. Intermediate cultural ecosystem services (also known as supporting services or ecosystem functions) are ecological processes which underpin/ contribute indirectly to final cultural ecosystem services.

Wessex-Bess WP5 have built upon the UKNEA definition and developed it further, by highlighting that direct contributions of ecosystem are essentially what we are conscious of. This is known as 'salience'. The working definition of CES being used by Wessex-BESS is:

“Salient features of environmental settings that are perceived (by beneficiaries) to give rise to psycho-social and biophysical health benefits”

This definition makes it possible for Wessex-Bess WP5 to collect data on the salient aspects of lowland grassland ecosystems via self-reporting methods. Using this definition, other features of ecosystems that support final CES (or have unconscious effects on beneficiaries) could be considered intermediate or supporting cultural ecosystem services. A particularly interesting question arising from this is whether biodiversity is a final cultural ecosystem service that members of the public are aware of, or whether a lack of awareness means it is predominantly a supporting service. Now there's a thought!