Cultural Ecosystem Services for social-ecological resilience and transformation – an introduction

Erik Andersson∗1, Maria Tengö1, and Keith Tidball2

1Stockholm Resilience Centre, Stockholm University (SRC) – Stockholm University Kräftriket 2B
SE-114 19 Stockholm, Sweden
2Dept. of Natural Resources, Cornell University – 91709 – Cornell University – Ithaca, New York 14853
US, United States

Abstract

Humans relate to nature in many different ways, filtered through culture and social context. These relationships and the values we see in nature are often positive, but their implications for social-ecological system dynamics remain incompletely understood. We use the conceptualisation of cultural ecosystem services (CES) as a platform to explore and better understand how cultural values shape human-nature interactions and influence the dynamics of social-ecological systems, and how less tangible services such as aesthetic appreciation, sense of place, spirituality, and educational functions contribute to human well-being. CES are perhaps the clearest examples of how ecosystem services are co-produced by ecosystems and our interpretation of them. Compared to other ecosystem services CES have received relatively little attention. Conceptually, CES pose a challenge to researchers and practitioners as the connections between ecological entities, such as a forest or landscape features, and perceived ecosystem services are much more multifaceted and dependent on individual users than say crop pollination or carbon sequestration. Much work on ecosystem services so far has been on quantification, and if CES are to be included in these efforts we need more diverse methods for capturing and evaluating data.

On a more theoretical level the way we think about CES is very much determined by the way we approach human nature relationships and social-ecological systems. In the ecosystem service literature we find examples of a clear conservation framing as well as studies based in ecological economics and valuation of nature. A third emerging approach emphasizes the co-production of ecosystem services by social and ecosystem processes. Different approaches take different analytical and theoretical positions in relation to how humans are viewed - as part of or apart from nature. Understanding and discussing what each position means relative to the construct of CES would forward also our understanding of social-ecological systems and how we understand and define their resilience.

We will demonstrate that the appreciation and recognition of CES and the positive connections between people and nature have potential for building social-ecological resilience and as levers for transformations towards ecosystem stewardship. One angle is that of the importance of understanding the critical role of CES in crisis transitions (which hopefully helps us learn as societies about CES in less drastic situations and to plan accordingly). Another is the educational aspect related to the stewardship discourse – we need to appreciate and understand functioning ecosystems if we are to move, or effect transformations, towards a more sustainable relationship with nature. Maintaining, reinforcing or re-creating (or indeed

∗Speaker
creating new) values that recognize our dependence on ecosystems and the biosphere has been suggested as an important remedy to the mental disconnect (described in the literature as for example extinction of experience and ecological illiteracy) of people to the systems supporting them, and as a way to engage people in ecosystem stewardship.

**Keywords:** Cultural Ecosystem Services, Seeds for transformation, Complex relations, Coping with disaster