

platform to identify further avenues for stewardship research in relation to the sustainability challenges of the Anthropocene.

Contributed session oral presentation:

Framing Biosphere Stewardship: An Ecological Solidarity Perspective

Raphaël Mathevet¹, François Bousquet², Christopher M. Raymond³

¹ *CNRS UMR 5175 CEFE, Montpellier, France*

² *CIRAD GREEN, Montpellier, France*

³ *Department of Landscape Architecture, Planning and Management, Swedish University of Agricultural Sciences, Alnarp, Sweden*

The concept of Ecological Solidarity is a key feature of the laws reforming National Park policy (2006) and biodiversity conservation policy in France (2016). The objectives of this presentation are (i) to show how ecological solidarity could be the core concept of a new social-ecological stewardship; (ii) to present a typology of the environmental stewardship approaches and to help positioning this social-ecological stewardship in an already rich conceptual landscape. First, we highlight how ecological solidarity provides a focus on the interdependencies among humans and non-human components of the SES. In doing so we identify ecological solidarity within a framework that distinguishes ecological, social-ecological and social-political interdependencies. In making such interdependencies apparent to humans who are not aware of their existence, the concept of ecological solidarity promotes collective action and reinforces the adaptive capacity of the SES and builds or makes stronger its resilience to changes. By focusing on the awareness, knowledge and acknowledgement of interdependencies between actors and between humans and non-humans, we present and discuss how an extension of a care approach from humans to non-humans and their interactions may lead the way for a grounded stewardship approach. In a second part we focus on the development and meaning of the stewardship concept in the current environmental science, ecology and biodiversity conservation literature. We present an adaptation of a political science framework and the 4 main types of stewardship we identified: reformist, adaptive, sustainability and transformative stewardship. The key distinctions between stewardship types are (i) the role of science, (ii) the exploration and integration of the plurality of values, and (iii) the capacity to modify values, rules and decision-making system. We then discuss on the consequences of these results, the place of social-ecological stewardship and present future directions for both research and integrated conservation and development policy.

Contributed session oral presentation:

Biosphere stewardship - reflections from indigenous governance systems and ethics of care and reciprocity

Rosemary (Ro) Hill

CSIRO, AHERTON, Australia

Ro Hill is a human geographer dedicated to collaborative environmental governance, indigenous peoples and social-ecological sustainability. She will contribute to the session reflecting on stewardship as care-knowledge-agency based on her experiences and perspectives from cross-cultural research with indigenous peoples and in collaborative knowledge platforms in Australia and elsewhere, including engagement with IPBES and the Task Force on Indigenous and Local Knowledge. In particular she will elaborate on indigenous worldviews and governance systems and ethics of care and reciprocity in relation to stewardship.
