



Guest Editorial, part of a Special Feature on [Conceptualizing, Analyzing, and Supporting Stewardship: Examining the role of civil society in environmental governance](#)

Conceptualizing, analyzing, and supporting stewardship: examining the role of civil society in environmental governance

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INTRODUCTION

How can we better understand, recognize, and support the role of local civic groups in environmental governance? Natural resource management often begins with a perspective that focuses on public authorities' formal jurisdictions and properties, e.g., federal, state, and local agencies, as well as private property owners and the parcels they manage. Through research focused on adaptation and collaboration in governance, environmental governance is recognized to be composed of collaborative arrangements and polycentric networks of actors working across sectors and scales (Dietz et al. 2003, Folke et al. 2005, Sabatier et al. 2005, Koontz and Thomas 2006, Ostrom 2010, Connolly et al. 2013; see also Davies 2011). At the local level, greater attention is needed on the role of formal and informal civic actors in these networks, not only as property owners or land managers, but as stewards who engage in acts of caretaking and claims-making across public and private lands (Barthel et al. 2005, Andersson et al. 2014). Recognition of the role local stewards play in urban environmental governance (Colding et al. 2006) emerged from the concept of adaptive comanagement (Olsson et al. 2004, Berkes 2009), advanced as part of the Millennium Ecosystem Assessment. At the same time, research focused on community-based resource management in the United States expanded to focus on urban ecosystem management (Burch and Grove 1993, Westphal 1993), with a focus on the civic sector (Svendsen and Campbell 2008). From these related branches of inquiry from Europe and America, we find a larger universe of study that explores place-based stewardship as a critical component and, perhaps, an emergent driver of environmental governance and practice.

As the study of stewardship has advanced, the nature of stewardship has been described and theorized. Many civic groups have missions that span different domains of environmental protection and community development, where stewardship (or civic ecology) is used to advance local quality of life (Connolly et al. 2014, Krasny and Tidball 2015). As such, stewardship practices can be undertaken by diverse groups, and individuals, with different foci on youth, seniors, social services, housing, arts, and immigration. These stewards can work independent of government; in collaborative and hybrid arrangements; and/or through contestation, activism, and advocacy. Recent scholarship offers one broad definition of environmental stewardship as conservation, management, monitoring, education, advocacy around, and transformation of the local environment, including land, air, water, waste, and toxics (Svendsen and Campbell 2008, Fisher et al. 2012, Landau et al. 2019). Others theorize stewardship through the domains of knowledge, care, and agency

(Andersson et al. 2017) and have proposed social-ecological stewardship frameworks drawing on multiple scales and methodological approaches (Romolini et al. 2016, Muñoz-Erickson et al. 2016, Bennett et al. 2018, Plummer et al. 2020). In light of global environmental change, scientists have extended this concept of stewardship to planetary or Earth stewardship (Chapin et al. 2011, Steffen et al. 2011), whereby all humans are considered parts of global assemblages (Ogden et al. 2013), but here our focus is on local stewardship. Further integration of perspectives from urban environmental stewardship, civic engagement, adaptive comanagement, and rural-based ecosystem management could contribute to advancing stewardship theory, by highlighting the role of context in shaping stewardship actors' relationships and actions.

Many ongoing questions about stewardship require a comparative approach; most research to date has focused on a single or small set of cases. Much remains to be understood about where, why, and how these stewardship groups emerge, persist, and, in some cases, professionalize in governance networks. How do stewardship practices vary across uneven and patchy landscapes, which differ in terms of social, political, and biophysical characteristics? Where do we see greater capacity to engage in stewardship work, and where are there gaps? What explains the strategies and tactics these groups pursue independently and via social networks? How do resources flow through networks leading to the types of collaborative ties that can strengthen community capacity? Thinking beyond civic actors as solely group-level entities, how do individuals steward and interact with civic groups in collectively stewarding places? What does stewardship contribute to place-making and place-keeping? Finally, what kind of impact do these groups have on the transformation of social ecological systems?

THIS SPECIAL FEATURE

This special feature focuses on conceptualizing, analyzing, and supporting environmental stewardship across different contexts and scales. While recognizing that these foci are mutually constitutive and overlapping, we adopt these three lenses to advance stewardship thinking in terms of: theoretical concepts, methodological innovations, and novel ways forward to support stewardship practices. As principal investigators of the Stewardship Mapping and Assessment Project (see <https://www.nrs.fs.fed.us/STEW-MAP/>), we organized this special feature out of a series of 2018 American Association of Geographers conference sessions of the same name, with the intent to identify "fellow travelers" with further examples and concepts of stewardship. In setting forth both the call for panelists and the

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subsequent call for papers, we did not expressly foreground the local scale. Yet, we were surprised to find that an abiding focus on place-based stewardship nonetheless emerged. This response affirmed to us that even in light of the Anthropocene and global challenges to our biosphere and human health, from climate change to COVID-19, that the local matters. For, in these local interventions lie the building blocks of care, collaboration, and shared work that are necessary to transform our institutions and practices at broader scales. In this feature, we present a set of cases which address local stewardship in multiple cultures, across rural and urban landscapes, and at multiple scales, from the individual to place-based stewardship networks. We include six research articles and three insight articles, which highlight both original empirical research and theoretical advancements in this field.

CONCEPTUALIZING STEWARDSHIP

This set of articles takes a variety of approaches to conceptualizing stewardship. A number of papers in this special feature refer to existing concepts of stewardship (Fisher et al. 2012, Bennett et al. 2018, Enqvist et al. 2018) that focus on stewardship as action. Other papers focus on stewardship as a value or frame. Piso et al. (2019), in their research on urban agriculture, draw on Brodt et al. (2006), which identified individual farmers as environmental stewards, characterized by their prioritization of sustainability and cooperation with nature. Warner (2019), relying on Bennett et al. (2018), frames environmental stewardship as an environmental narrative separate from community concerns. Both Jasny et al. (2019) and Cockburn et al. (2019) focus on stewardship as collaboration, with Jasny et al. analyzing empirical collaboration networks and considering the role of space in collaboration formation. Cockburn et al. (2019) unpack collaboration in the context of weak governance and a heterogeneous landscape, creating a conceptual model of barriers and enablers of collaborative stewardship, identifying structural, relational, and individual aspects. Carretta (2020) draws upon Enqvist et al. (2018)'s concept of stewardship as knowledge-care-agency, in her examination of women stewards, focusing on stewardship as care.

Other papers in this special feature shine their spotlight onto a particular conceptualization of stewardship in relation to broader social and ecological theories. Blanc (2019) conceptualizes stewardship as ordinary environmentalism, which considers the relations between human individuals and groups with nonhumans, how they renew the local environment and spaces, how these relations affect ecological quality, and that these groups are of a public character. McMillen et al. (2020) reflect on how their interactive workshops and community of practice, where local and Indigenous types of ecological knowledge are exchanged, are rooted in biocultural stewardship, which conceptualizes stewardship not only of natural resources but as a system of practices that cares for the larger network of relationships within the social-ecological system. Filip (2020) focuses on the structural aspects of urban environmental stewardship as a social-ecological system (Fisher et al. 2012, Connolly et al. 2013), considering areas of interest (turfs), participants (stewards), their activities, modes of operation, and governance roles.

ANALYZING STEWARDSHIP

How individuals perceive and value the environment can affect their behavior related to stewardship. Our special feature's first

article, "Types of urban agricultural stakeholders and their understandings of governance" (Piso et al. 2019) addresses stewardship from the lens of individual farmers in Lansing, Michigan and their perceptions of governance. Piso et al. find stakeholders fall into four categories of motivation: urban agricultural stewards, risk managers, food desert irrigators, and urban agricultural contextualists. Our second article, "Explaining political polarization in environmental governance using narrative analysis" (Warner 2019), examines the role of politics in affecting river governance after flooding from Hurricane Irene, in rural New England, United States. Warner points to stakeholders holding one of two narratives of either environmental stewardship or community protection and perceiving them as separate, not interconnected. Warner notes that the process leading to these separate narratives does not allow for compromise or novel governance schemes for addressing stakeholders' concerns.

Collaboration among individuals and groups is a critical aspect of stewardship capacity and social innovation. "Working together: the roles of geographic proximity, homophilic organizational characteristics, and neighborhood context in civic stewardship collaboration networks in Philadelphia and New York City" (Jasny et al. 2019) examines how stewardship organizational networks vary in two northeastern U.S. cities, to identify commonalities and differences. Cockburn et al. (2019)'s paper on "Collaborative stewardship in multifunctional landscapes: toward relational, pluralistic approaches" focuses on a case study in the Langkloof region of South Africa and points out that individual and social-relational factors may be the critical pieces that enable collaboration, in addition to other studied factors (political-historical, contextual, institutional). In "Homosocial stewardship: the opposed and unpaid care work of women water stewards in West Virginia, USA," Carretta (2020) draws attention to the role of women in stewarding water in a coal mining region in West Virginia, USA, pointing to how women organize and work together in a homosocial, e.g., single gendered, manner.

Stewardship can also be examined via a social-ecological systems approach. In "Context matters: influence of organizational, environmental, and social factors on civic environmental stewardship group intensity," Johnson et al. (2019) analyze stewardship groups across four cities in the U.S. (Baltimore, Chicago, New York City, and Seattle), to understand the role of social-environmental context and organizational landscapes. They find organizational factors have a stronger association with the number of stewardship groups working in an area than social and ecological contextual factors like amount of open space and neighborhood demographics. Nathalie Blanc's insight paper "From ordinary environmentalism to the public environment: theoretical reflections based on French and European empirical research" offers a critical geographic examination of how individuals engage in "ordinary environmentalism" in their caring for public spaces in Paris and elsewhere in Europe. McMillen et al. (2020) in their paper "Biocultural stewardship, Indigenous and local ecological knowledge, and the urban crucible" point to urban systems as a crucible where concepts of biocultural stewardship can be formed, tested, and shaped, drawing linkages between Hawaiian cultural concepts and the urban environment of New York City.

SUPPORTING STEWARDSHIP

Research efforts increasingly consider the research-practice interface. Two papers in our special feature in particular highlight this exchange between research and practice. McMillen et al. (2020) explore how diverse knowledge systems and colearning engagements can strengthen a community of practice and enrich our stewardship efforts. In “Local institutions of culture as urban stewards: in pursuit of hybrid governance in Warsaw, Poland,” Filip (2020), as an embedded researcher in a cultural institution, examines how local cultural institutions can serve as urban steward. He highlights the legal requirements and resources needed to enable public institutions to form a coalition and have a seat at the table for public space planning in Warsaw, Poland, a context where this sort of collaborative arrangement is emergent and novel.

CONCLUSION

Through the curation of this work, our intention is to amplify ideas around local, civic environmental stewardship, both as a concept itself and as it relates to other aspects of social-ecological systems. The authors in this special feature have given us new insights into the driving factors that influence environmental stewardship by a wide range of actors; the result is a set of cases demonstrating a variety of forms that stewardship can take. Beyond a conceptual framework, this compendium of empirically grounded cases helps us to better situate and understand how place-based stewardship happens. Notably, many authors have shown a way forward by offering suggestions for supporting stewardship research and practice. Warner (2019) points to being reflexive as researchers when studying environmental governance. Others point to the opportunities and outcomes of coproduction and research-practice collaborations (Filip 2020, McMillen et al. 2020). Critical work has already begun to understand the role and form of stewardship in regimes with different arrangements between state and nonstate power (see Krasny and Tidball 2015). Articles in this special feature highlight future directions for environmental stewardship scholarship, including the need to better understand stewardship network organization and flows, factors influencing successful collaboration among groups, and the diversity of governance structures observed across contexts. Such additional research and synthesis are needed to further develop a theory of stewardship that draws upon the knowledge and experience of all cultures and geographies.

Responses to this article can be read online at:
<http://www.ecologyandsociety.org/issues/responses.php/11970>

Data Availability:

No data or code were used in the writing of this Guest Editorial.

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