

Doing Conservation Differently: Toward a Diverse Conservations Inventory

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Abstract Many scientists and environmental activists argue that the scale and scope of contemporary conservation must increase dramatically if we are to halt biodiversity declines and sustain a healthy planet. Yet conservation as currently practiced has faced significant critique for its reliance on reductionist science, advocacy of “fortress”-like preservation measures that disproportionately harm marginalized communities, and integration into the global capitalist system that is the root cause of environmental degradation. The contributions to this special issue, developed from a panel at the Anthropology and Conservation conference co-hosted by the Royal Anthropological Institute and the Society of Ethnobiology in October 2021, collectively argue for what we, borrowing from Gibson-Graham’s diverse economies framework, call “doing conservation differently.” By bringing marginalized, hidden, and alternative conservation activities to light, researchers can contribute, in the spirit of Gibson-Graham’s work, to making these diverse conservations more real and credible as objects of policy and activism. This special issue contributes to inventorying the diverse conservations that already exist, which opens new spaces for ethical intervention and collective action.

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Introduction

Many scientists and environmental activists argue that the scale and scope of contemporary conservation must increase dramatically if we are to halt biodiversity declines and sustain a healthy planet (e.g., Allan et al. 2022; Wilson 2016). Conservation’s “basic and central aim” is “preventing the irreversible loss of life” and other forms of environmental harm to ensure the wellbeing of the earth’s human and nonhuman denizens (Hamblen and Canney 2013:2; see also Knight et al. 2019). Yet exactly what this should look like is a question that elicits intense debate. Some scholars have criticized mainstream conservation for being reductionist, grounded in a western worldview that separates humans from the environment, and advocating exclusionary “fortress”-like preservation measures that harm Indigenous peoples and local communities (e.g., Bartel et al. 2020; Berkes 2004; Brockington et al. 2008; Delacámara et

al. 2020; Knight et al. 2019; Massarella et al. 2021). The global institutional conservation apparatus is based on such mentalities and practices, with their clear links to capitalism, colonialism, racism, and a centuries-long history of “protecting nature” from certain kinds of people, often black, brown, and poor, while ensuring a wealthy white overclass’ access (see Brockington et al. 2008; Kashwan et al. 2021; Rudd et al. 2021).

The contributions to this special issue, developed from a panel at the Anthropology and Conservation conference co-hosted by the Royal Anthropological Institute and the Society of Ethnobiology in October 2021, collectively argue for what we, borrowing Gibson-Graham’s diverse economies framework, call “doing conservation differently.” Gibson-Graham’s “weak theory”—so called because it refuses to extend explanation too widely—(Gibson-Graham 2008:619)



—adopts an experimental rather than a critical orientation, and eschews the impulse for a single grand action strategy. This theory has been enormously influential for a wide range of social scientists committed to undermining capitalism’s hegemony (e.g., Amoamo et al. 2018; Beacham 2018; Cameron and Gibson 2020; Foley and Mather 2016; Gibson et al. 2015; Gibson-Graham, et al. 2013; Gibson-Graham and Dombroski 2020a, b; Gibson-Graham and Roelvink 2011; Jehlička and Daněk 2017; Sharp et al. 2022; Snyder and St. Martin 2015; Wynne-Jones 2014). Working in a wide range of contexts, these scholars inventory the many non-capitalist economic practices that already exist, indeed making up the majority of economic activities around the world. Case studies potentially of interest to ethnobiologists explore barter and gardening for household provisioning (e.g., Jehlička and Daněk 2017), community supported agriculture/fisheries (e.g., Beacham 2018; Snyder and St. Martin 2015), cultural ecotourism and fish-waste conservation guided by Indigenous values and rights (e.g., Amoamo et al. 2018; Sharp et al. 2022), livelihood farmers’ resistance to payment for ecosystems services projects (Wynne-Jones 2014), and collectively-owned catch shares in which revenues are reinvested in local communities (e.g., Foley and Mather 2016). Scholars working within this paradigm make marginalized, hidden, and alternative economic activities more real and credible as objects of policy and activism (Gibson-Graham 2008:618). By “reading for difference”—deviations from and contradictions to neoliberal capitalist norms—diverse economies research contests the dominant political-economic system, focuses attention on human and human–nonhuman interdependencies, and invites us to rethink our place in the world, including as scientists (see also Cameron and Gibson 2020; Gibson et al. 2015; Wynne-Jones 2014; Snyder and St. Martin 2015). Crucially, this scholarship suggests that resources to guide transformative change are already present in the world around us.

As editors of this special issue, we present these articles as a step toward a “diverse conservations inventory” (see Gibson-Graham and Dombroski 2020a:8) of non-hegemonic conservation practices that nurture subjectivities, languages, and communities of conservation grounded in a new recognition of interdependence, the ethical centerpiece of Gibson-Graham’s approach. The case studies provided here show that “doing conservation differently” requires

expanding our understanding of what counts as knowledge or “science.” It demands researchers who embrace new subject-positions and engage in practices that diverge from conventional understandings of conservation and/or scientific research. Finally, departing from a range of mentalities and contexts, the “diverse conservations” represented here advance practices of “connection-amidst-difference” (see Gibson-Graham and Miller 2015:10) that acknowledge and respect our existential interdependence.

Recognizing Conservation Knowledge/Science

Expanding understandings of what counts as conservation science by recognizing conservation knowledges developed outside western academic settings is fundamental to doing conservation differently. Many scholars have noted the tendency in conservation to prefer expert-based approaches in which expertise is synonymous with western science (e.g., Bartel et al. 2020; Berkes 2004; Chua et al. 2020; Rudd et al. 2021). Yet as ethnobiologists and other researchers have pointed out, Indigenous peoples and local communities often have “particularly special knowledge about their homeplaces, the species that occur there, the changes that have taken place over the years, and the close, interdependent relationships among people and other life-forms” (Turner et al. 2022:632). Some scholars use the language of the western academy to emphasize the value of Indigenous and local knowledge for conservation, describing this place-based erudition as grounded in hypothesis testing, evidence gathering, causal explanation, inductive generalization, and ampliative interference (Weiskopf 2020:2; see also Berkes and Berkes 2009). Others point out that Indigenous and local knowledges can have their own epistemological and ontological foundations (e.g., Berkes 2018:chapters 5-7; Blaser 2009; Lopez-Maldonado 2022; cf. Cebrián-Piqueras et al. 2020). Long histories of sustainable, ethical interactions between specific human and non-human communities should make the conservation value of these knowledges self-evident, as do their persistence and adaptability in the face of pasts and presents dominated by colonial and capitalist expansion (see, e.g., Beaulieu-Guay 2022; Berkes 2018). As such, they need neither resemble western science nor be assessed in its terms.

As we note above, scholars who work in the diverse economies framework argue that seeing economic heterogeneity is key to undermining

capitalism's hegemony and bringing new worlds into being. Similarly, our diverse conservations initiative takes recognizing heterogenous conservation knowledges as an essential step toward countering a hegemonic global conservation apparatus. Guided by Gibson-Graham's weak theory, our diverse conservations approach eschews a grand strategy for embracing heterogenous conservation sciences and adopts instead an experimental orientation. For example, in acknowledging Indigenous and local knowledges as conservation knowledges, some authors stress the similarities between these and western science in their empirical evidence base and observational methodologies. Keleman, Sá, and Temudo (2023:10–21) point out in "Rooted in the Mangrove Landscape" that Diola children have ethnoichthyological knowledge that is ignored by mainstream conservation scientists. The Diola village in the Cacheu region of Northern Guinea-Bissau where the authors conducted ethnographic research is regarded as part of a marine biodiversity hotspot not least because of its mangroves which host shelter- and spawning grounds for migrating fish. Local children, particularly boys, have specialized knowledge relevant for biodiversity conservation because of their participation in fishing (boys) and fish marketing (girls), as well as other mangrove-related activities such as swimming, rice cultivation, hunting (boys) and wild edible plant collection. In Keleman et al.'s words, mangroves are "a natural learning ground" for environmental stewardship in this community. However, rather than deploying children's knowledge for participatory biomonitoring and mangrove conservation, conservationists largely ignore it. Children's ethnoichthyological knowledge is further threatened by the area's integration into a cash economy and the intrusion of foreign religions.

Other authors emphasize the independent epistemological and ontological foundations of Indigenous and local knowledges, but tactically adopt language from western science to "translate" their value for conservation scientists, if only to demonstrate the lacunae that exist in western ways of knowing. For example, McGuire and Mawyer (2023:22–36) draw on ethnoecological research conducted along the rural Puna coastline on the island of Hawai'i to reveal the unseen in mainstream coastal conservation. They emphasize Indigenous knowledge as an autonomous system which includes "mediators between human and more than human worlds, between conception and perception, mind and action,

rights and obligations." Scrutinizing contemporary and historical 'Ōiwi practices, they show that sea salt (*pa'akai*)—an "unseen presence" in mainstream coastal conservation—operates as an indicator for biodiversity, marking dependent biota communities such as certain types of seaweeds, marine invertebrates, and fish. *Pa'akai* in many respects guides 'Ōiwi practitioners' engagements and interactions within coastal environments, and sea salt has an essential role in coastal ecologies. By attending to 'Ōiwi practices and understandings, McGuire and Mawyer argue, mainstream conservationists and sustainability scientists could learn to see their blind spots and co-create a richer, more expansive practice of coastal care.

Diverse Conservation Subjectivities Elicit New Practices

Gibson-Graham describes a diverse economies approach as "co-implicated processes of changing ourselves/changing our thinking/changing the world" (2008:618). By recognizing the value of heterogenous conservation knowledges, ethnobiologists and other conservation scientists "change the world" by "changing our thinking," performing into being new subjectivities and concomitantly new relationships and practices. As many of the contributions to this special issue demonstrate, the subject-position of "(western) scientific expert" which developed under modernity metamorphoses into new roles in conservation projects attentive to Indigenous and local knowledges. Several studies envision researchers, practitioners, and local peoples as strategic allies who collaborate on conservation initiatives in which all participants have much to teach and to learn (see also Malmer et al. 2020:84–85; Rose 2018). To adopt this scientist subjectivity, researchers must be(come) conscious of the political and economic ramifications of their work and explicitly promote conservation activities that consider the needs, concerns, and visions of all participants.

In their study of secondary forests in Costa Rica's Northern Zone, Shebitz, Agnew, Kerns, Oviedo, and Ha (2023:37–46) envision a new relationship between local medicinal knowledge and conservation that could guide a more expansive notion of conservation. Two pioneer trees (*Vismia macrophylla* and *Pentaclethra macroloba*) are fast-growing actors in local deforested areas that restore soil fertility and facilitate tropical forest recovery. Local residents, who have limited access to western medical professionals or facilities,



use these tree species to prevent fungal skin infections. Yet although *V. macrophylla* and *P. macroloba* play a key role in reforestation and have important pharmaceutical utility for area residents, Costa Rica's secondary forests are not recognized as conservation objects. The authors argue that local ethnobiological knowledges should join mainstream conservation science in informing conservation decision-making in this area. Crucially, this is not only a matter of expanding tropical forest protection to secondary forests. Rather, policymakers should also design economic incentives for landowners in order to ensure that a politically-attuned conservation prioritizes local medicinal uses rather than feeding these species into global pharmaceutical markets.

In "The Challenges of Symmetrical Dialogue," Bollettin, Ludwig, and El-Hani (2023:47–55) describe a series of engagements in which local people from two fishing communities in Bahia state, Brazil, and an interdisciplinary research team work together on biodiversity and education initiatives that support intercultural dialogue, mutual learning, and self-determination as well as conservation. The awareness that science is implicated in power regimes informs the design of this reciprocal, action-oriented research project. Heterogenous knowledges, including local environmental knowledge and academic knowledges from the humanities, social sciences, and natural sciences, are brought together in "symmetrical dialogues" (or more symmetrical, compared to mainstream conservation practice) to inspire innovation, including new curricula and new modes of oceanographic and ecological research. This strategic alliance has been transformative for all participants, not least the scientists who learned to "do conservation research differently," including by broadening their research practice to include pressuring government officials to involve their community partners in conservation decision-making and tourism planning. As the authors write, working to achieve symmetrical dialogues provides a tool for researchers to question their goals, make their presuppositions explicit, and ultimately align their concerns and priorities with those of the community.

Sandroni (2023:72–82), whose research concerns the Brazilian Atlantic Forest in Bahia state, organizes her contribution around the insight that "different actors have different access to the discursive power to define what should be understood as environmental degradation, its causes and solutions." She scrutinizes

discursive disputes about biodiversity conservation between state and non-governmental institutions, on the one hand, and the Tupinambá Indigenous people, on the other, arguing that conservation scientists and practitioners in this area must revise their practices to take power relations into account. State actors and non-governmental organizations frame environmental degradation as deriving from all social actors' lack of knowledge and propose conservation "solutions" that are "blind" to colonial histories or contextual specificities. In this conservation practice, particular species, defined in global indicators, should be used for biodiversity monitoring and preservation measures. For the Tupinambá, environmental degradation relates to land use that is controlled by big landowners, miners, and other "outsiders." As such, the solution is recognizing Indigenous land claims. Sandroni points out that both narratives position themselves as challenging dominant perspectives by advocating for forest conservation. If the diverse actors in the Bahia Atlantic Forest could expand this positioning to encompass an in-depth, historically-specific understanding of knowledge-power relations, "changing our thinking" could become the basis for a strategic alliance between all parties and a new practice of "convivial conservation."

In their contribution, Bosco and Thompson (2023:56–71) describe the Skarù·re? Food Forest Project, which adopts a reconciliation-based and decolonial conservation approach and has expanded tribal food sovereignty and community health while facilitating learning among and between local members of the Tuscarora Nation and participating scientists. The Skarù·re? Food Forest Project initiated a collaboration between a non-Indigenous horticulture researcher and Skarù·re? (Tuscarora Nation) community members centering around the contributions of temperate nut trees to Indigenous food sovereignty and nature-based science approaches to climate change and biodiversity conservation. Guided by principles of reconciliatory science (Bosco's host university, Cornell, lies upon stolen Haudenosaunee land), the project prioritized reciprocal relationships, meaning that the researcher's role extended beyond data extraction. The project successfully redistributed financial resources to expand food sovereignty conversations among a wide audience, enrich the local area with nut, fruit, and medicinal plants, and create a living compendium of

culturally relevant nut resources useful to researchers and community members alike.

Conservation Being-in-Common

Doing conservation differently reconfigures the community of conservation to promote what diverse economies theory terms “being-in-common” or “connection-amidst-difference” (Gibson-Graham and Dombroski 2020a:19; Gibson-Graham and Miller 2015:9). This orientation to conservation emphasizes more-than-human interdependence and flourishing—a goal that little resembles the global conservation approach institutionalized today (see Kashwan et al. 2021; Rudd et al. 2021). Conservation being-in-common, as indicated in several of the special issue’s case studies, entails acknowledging non-humans as community members, rather than treating non-humans as conservation “objects.” Many ethnobiologists and other scientists have pointed out that local and Indigenous knowledge traditions often emphasize “nurturing responsible relationships among humans and non-humans” (Reyes-García et al. 2022:86). “Relational” or “kincentric” understandings of the environment include “nature” in the community, with attendant requirements for ethical practice (Turner, Cuerrier, and Joseph 2022). This directly affects conservation initiatives. Nadasdy’s 2011 study of an attempt by Kluane hunters of the Yukon, Canada, to collaborate with western scientists to manage the wolf population is a case in point. The Kluane regard “human-persons” and “wolf-persons” as sharing a community, which entails norms for conduct that diverge sharply from those of the scientists. To the scientists’ consternation, the Kluane objected to plans to sterilize wolves rather than kill them. Sterilization suggested human dominance and ownership of the wolves, whereas killing the wolves (culling) acknowledged the wolves’ full personhood. When the scientists could not accept the implications that the wolves’ community membership had for conservation practice, the collaboration failed.

Conservation connection-amidst-difference, as this introduction has repeatedly shown, also means sharing or ceding conservation decision-making power to human actors who have previously been marginalized and disenfranchised in the global conservation apparatus. Acknowledging the expertise of Indigenous and local peoples catalyzes this transformation, which changes the relationships and structure of the conservation community and in turn affects the broader socio-political regime within which

conservation is located. Given that the goal of a diverse economies/diverse conservations approach is dismantling hegemony, doing conservation differently can—and perhaps should—create tension and conflict. We do not regard this as negative; as other research emphasizes, the dominant mode of conservation also entails conflicts (see Bartel et al. 2020; Brockington et al. 2008; Kashwan et al. 2021; Rudd et al. 2021; West 2006).

In the conclusion to this special issue, Singleton and Gillette (2023:83–91) spotlight how redefining conservation knowledge has socio-political consequences for the conservation “community” by applying Michael Thompson’s rubbish theory (2017) to the volume’s case studies. Rubbish theory is a model of social valuation that links the classification of “objects” (things, people, ideas) to how society is structured. The authors use rubbish theory concepts to scrutinize the extent to which the various conservation engagements described in the special issue attempt to “level” existing social hierarchies and work toward a more egalitarian order, or instead modify them while nevertheless upholding status positions such as the expert western scientist. Ultimately, they argue that calls for pluralizing knowledge are calls to change society. The question then is: how far do we wish to go?

Doing Conservation Differently: Towards an Inventory of Diverse Conservations

Ethnobiologists Turner, Cuerrier, and Joseph, drawing on their own research and the findings of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), argue that we must move away from mainstream conservation approaches and embrace “valid alternative ways of knowing and being” (2022:639). They warn that the “consequences of *not* initiating change, innovation and diversity in our choices and approaches in relation to other species and the ecosystems we share ... [are] dire” (639). As a discipline, ethnobiology has since its inception viewed Indigenous and local environmental knowledges as “valid alternative ways of knowing and being.” The contributions to this special issue reflect this orientation, while also starting a process of inventorying what “change, innovation, and diversity in our choices and approaches in relation to other species and the ecosystems we share” can look like.

Central to the diverse conservations we document here are recognizing expert knowledges from outside

the academy—the kinds of knowledges that ethnobiologists have long argued are important—and conducting research in partnership with local and Indigenous communities. In these collaborations, the researcher strives to be aware of and consider the political and economic consequences of any given initiative. This requires adopting new scientist subject-positions and modifying how scientific research is conducted, what Gibson-Graham describes as changing ourselves and changing our thinking. This in turn, if initially only in a modest way, affects the structure and relations of the conservation “community,” with implications for the broader power arrangements within which conservation takes place. Many argue that making such changes is essential if we wish to achieve progress toward greater human and environmental well-being (e.g., Kashwan et al. 2021; Knight et al. 2019; Rudd et al. 2021), or what we, using the diverse economies framework, term conservation being-in-common.

This special issue seeks to perform into being a conservation unbound from global forces of colonialism and capitalism (cf. Brockington et al. 2008). In our view, the articles comprising this special issue facilitate our collective ability to do conservation with a greater awareness of and care for the web of relationships upon which conservation is ultimately founded. By disseminating research that exemplifies new collective identities for academic conservationists, we advance, if only incrementally, the fundamental, systemic change to conservation practice that many scholars believe is long overdue. Done differently, conservation exhibits creativity in engaging with diverse contexts, conflicts and knowledges, while conservation practitioners gain an awareness of the complex and uneven consequences of their actions in dynamic situations. The diverse conservations described here challenge scholars to imagine new roles and broaden their practices in the service of better environmental and social outcomes. As co-editors, ethnobiologists, and environmental social scientists, we submit that a diverse conservations inventory can be part of “changing the world.”

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