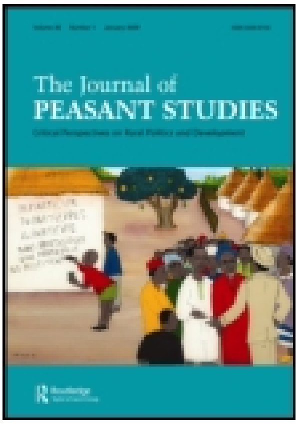

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Enclosing the global commons: the convention on biological diversity and green grabbing

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'Green grabs,' or the expropriation of land or resources for environmental purposes, constitute an important component of the current global land grab explosion. We argue that international environmental institutions are increasingly cultivating the terrain for green grabbing. As sites that circulate and sanction forms of knowledge, establish regulatory devices and programmatic targets, and align and articulate actors with these mechanisms, they structure emergent green market opportunities and practices. Drawing on the idea of primitive accumulation as a continual process, we examine the 10th Conference of the Parties to the United Nations Convention on Biological Diversity as one such institution.

Keywords: primitive accumulation; land grabs; Convention on Biological Diversity; environmental governance; neoliberal conservation

'Green grabs,' or the expropriation of land or resources for environmental purposes, comprise an important component of the current explosion of global land grabs, or 'large scale (trans) national commercial land transactions' that are associated with food price spikes and the biofuels boom, among other factors (Borras *et al*. 2011, 210, see also De Schutter 2011, Hall 2011). These green grabs constitute forms of enclosure that operate under the guise of addressing the global environmental crisis, and, in this paper, we examine a specific type of green grab, 'conservation enclosures,' which are undertaken for biodiversity conservation. Green grabs are not new *per se*, and conservation has long been used to justify new enclosures, but, the scope, modes and mechanisms of legitimation, as well as many of the actors involved today, are new.

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These emergent conservation enclosures entail not only physical land grabs but also the privatization of rights to nature, the creation of new commodities and markets from nature, the green sanction for otherwise declining forms of capital accumulation and the disabling of institutions that could pose threats to expanded accumulation. As historically influential conservation actors have embraced the market as the best way to conserve biodiversity, nature is being privatized, commercialized, and commoditized at an exponential rate through initiatives ranging from payment for ecosystem services to wildlife derivatives. While eco-tourism, exploitation of genetic resources for pharmaceutical and agricultural purposes, public–private partnerships and green corporate social responsibility initiatives remain prevalent forms for private accumulation, speculation on land, carbon and wildlife is rapidly becoming an important means of extracting value from nature (Sullivan 2011). Further, by supplying corporations with critical stamps of environmental stewardship (Corson 2010), as well as hindering non-market strategies for managing environmental degradation, and structuring new nature markets such that they reinforce North–South inequality in global markets (Bond 2011), conservationists are also reinforcing otherwise declining forms of capital accumulation, in addition to inventing new opportunities.

The privatization of state functions under neoliberalism and the financialization of global markets have shifted power relationships among state, market and civil society groups in global environmental governance. As a result, green grabbing is increasingly cultivated beyond the state through transnational networks of public, private and not-for-profit organizations that reproduce, within domains of international environmental policy-making, the conditions crucial to accumulation. In the process, both states and historically important conservation actors – such as conservation scientists, indigenous and local communities (ILCs), and non-governmental organizations (NGOs) – are realigning their relationships with new actors in the financial sector, entertainment and other industries in an effort to maintain influence over environmental governance. Thus, '[w]hat is new in the land grabs today are the new mechanisms of land control, their justifications, and alliances for "taking back" the land, as well as the political economic context of neoliberalism that dominates this particular stage of the capitalist world system' (Peluso and Lund 2011, 672). In particular, the financialization of markets for nature's exchange is subjecting both nature and its governance to the fluctuations of financial markets. As Bond (2011, 2) asserts in reference to carbon markets: '[T]he spatio-temporal rhythms of financial markets now drive global-scale public policy for addressing global climate change, even in the wake of neoliberalism's crises, revisions, delegitimation and attempted relegitimation'.

We argue that international environmental institutions and negotiations have become critical sites and processes for enabling and structuring new green market opportunities and practices as they orchestrate the social and political relations among various state and non-state actors through which the mechanisms, incentives and legitimating conditions for green grabs are established. Building on the work of scholars who explore conservation as primitive accumulation (e.g. Büscher 2009, Corson 2011, Kelly 2011) and the rising influence of the private sector on conservation (e.g. Chapin 2004, Corson 2010, MacDonald 2010a, 2010b), we draw specifically on an ethnographic study of the 10th Conference of the Parties to the Convention on Biological Diversity (CBD) to illustrate the role of global environmental institutions as 'sites' in the current capitalist world system for the production of mechanisms, justifications and alliances for new forms of primitive accumulation.

Reconstituting 'the field'

As a *space* where the local and global are co-produced through the sanction and circulation of particular forms of knowledge, the establishment of regulatory devices and programmatic targets, the embrace of particular forms of nature as a commodity and the structuring and aligning of public–private relationships (Barnes 2010, MacDonald and Corson 2012), the CBD is also a *place* constituted by bundles of social relations and power dynamics formed through historically and geographically sedimented practices and processes (Massey 1999). It regularly convenes a variety of actors – peasants, indigenous peoples, individual investors, celebrities and the representatives of states, private companies and NGOs, among others – to negotiate mechanisms for control over land and resources. As it circulates and sanctions representations of nature that render new markets and land enclosures acceptable and desirable; establishes protected area targets that justify and attract financial support for new physical land enclosures; institutionalizes market-based programs that create new realms for capital accumulation such as wildlife derivatives and carbon trading; solicits private financing for conservation; and orchestrates a realigning of state, market and civil society actors, it becomes a site for the restructuring of international conservation governance so as to enrol conservation as a conduit for capital expansion.

Understanding the role of the CBD in the configuration of green grabs means thinking about the relations between individual discrete field sites and the various meetings and mechanisms that make up 'the CBD'. While here we focus on one of those meetings – the 10th Conference of the Parties to the CBD (CBD/COP10) – the perspective that informs this paper is based in rethinking the idea of the conventional field site. While conventional ethnographic practice continues to take place in defined, bounded or contiguous communities, our approach, following Clifford (1997), Gupta and Ferguson (1997), Marcus (1998) and Hannerz (2003) among others, defines 'the field' as constituted by relations across space and time – as a set of locales linked by actors drawn together and brought into association through transnational environmental governance, as well as the projects that it generates. Thus, our 'sites' in the conventional ethnographic sense, even as they are institutionally permanent and constitutionally mandated, are physically temporary, often appearing and disappearing according to statute or the organizational needs to convene actors over emerging matters of interest. This reconfiguration means that 'going to the field' involves both attending these events and attending to the actors that move through them in time and space. It also positions the CBD/COP10 as a node in a network of events central to environmental governance 'in which people, ideas and objects can be tracked to understand the ways in which they are orchestrated and configured' (MacDonald 2010a, 262).

Studying this differentiated field requires a new approach. CBD meetings of the Parties are large affairs and thus it is impossible for a single observer to track a thematic thread through or observe an entire meeting comprehensively. To address this challenge, we use a methodological practice, 'collaborative event ethnography' (CEE) (Brosius and Campbell 2010), which entails working as a 17-person team, to mimic the ways in which official delegations distribute representatives across large international events. The work presented here is drawn in part from our involvement in a CEE of the CBD/COP10, which took place in Nagoya, Japan, in October 2010.

The CBD as an ethnographic site

An outcome of the 1992 United Nations (UN) Earth Summit, the CBD entered into force in 1993 and has 191 Party members. At its biennial COP, these Parties come together to review progress, identify priorities and establish work plans, as well as provide direction to the Global Environment Facility (GEF), which is the financial mechanism of the CBD, and the Subsidiary Body on Scientific, Technical and Technological Advice, which provides scientific advice to the CBD. COP meetings encompass the formal plenary; two main working groups in which delegations state their positions on various decisions before the COP; break-out groups of smaller contact groups or friends of the chair sessions in which selected delegations negotiate specific text for presentation to the working groups; 'side events', or topical workshops, often organized by NGOs and intergovernmental organizations; press briefings; and high-level, closed-door meetings, open primarily to Parties.

Even though we refer here to 'the CBD', we recognize that it is not a monolithic institution. Rather, the 'lived reality' of the CBD is defined by a shifting network of relationships, imbued with continually changing power dynamics among Parties, NGOs, Intergovernmental Organizations, representatives of ILCs and associated advocacy organizations, firm representatives, trade associations, lobbyists, scientists and others (MacDonald 2010a). Thus, in this reconstituted 'field-site', we attend to how differential power relations among actors shape the way in which transnational environmental governance translates into material practice. Similarly, as we and other authors discuss elsewhere, the rising centrality of the market and its associated relations of governance is not an uncontested process (e.g. McCauley 2006, Bond 2011, Corson *et al.* in review). From outright resistance by coalitions of some NGOs and indigenous communities (e.g. The No REDD Platform 2011) to the more muted critiques in mainstream conservation journals (e.g. Redford and Adams 2009), the shift toward the universal commodification of nature has encountered friction. Nonetheless, even as many actors associated with the CBD or its program of work contest its embrace of market-based programs, they also adjust and adapt to those programs. The CBD has the capacity to both direct material resources of its state members to organizations and provide a 'stamp' of legitimacy for organizations that align and articulate with that program of work (MacDonald 2010b). Accordingly, as organizations reshape their conservation strategies to respond to or draw upon the emergent domination of market ideologies within the CBD, they contribute to their hegemony. The institutionalized embrace of protected area targets, market-based programs, private financing and partnerships, for example, have collectively shifted the terrain on which these contestations take place, and these transnational and dynamic assemblages of actors are in fact creating the conditions for *ongoing processes* of primitive accumulation.

Primitive accumulation as process

In Volume I of *Capital*, Marx [1867] (1977) defined primitive accumulation, or 'the historical process of divorcing the producer from the means of production', as the point of departure of the capitalist mode of production:

> The process, therefore, that clears the way for the capitalist system, can be none other than the process which takes away from the labourer the possession of his means of production; a process that transforms, on the one hand, the social means of subsistence and of production into capital, on the other, the immediate producers into wage labourers (p. 85).

The enclosure of the English commons, as he and others have argued, amounted to a redefinition of property rights that included both the physical fencing in of lands to enable the exclusion of other potential users and the extinction of common and customary use rights (see also Thompson 1975, Neeson 1993). Of note, as English Common Law (defended by the Crown) had previously protected many forms of common right as legitimate property, most enclosures before 1700 were carried out by agreement among the big landholders (illegally and against the wishes of Parliament). However, as Wood (2002, 108), following Marx (1977), and Thompson (1975) among others, observes, 'once the landed classes had succeeded in shaping the state to their own changing requirements... there was no further interference, and a new kind of enclosure emerged in the eighteenth century, the so-called 'Parliamentary enclosures.' This referred to the use of acts of Parliament – in a Parliament composed of landlords and lawyers – to abolish those types of property rights that interfered with some landlords' powers of accumulation (then called 'improvement'). Thus the seventeenth- to nineteenth-century enclosure practices and subsequent use of parliamentary procedure to remove the obstacles to accumulation provides a lens through which to interpret how states and a transnational managerial class work through organizations like the CBD to create the conditions for the contemporary enclosures that have accompanied neoliberal governance.

While conventional interpretations of Marx (e.g. Luxemburg 1951, Zarembka 2000) often conceived of primitive accumulation as a historical moment, more recent analyses have re-interpreted the concept as an ongoing process in order to highlight the continuing dispossessions that enable capital accumulation (e.g. De Angelis 1999, Harvey 2003, Perelman 2000, Kelly 2011). Such a move necessitates disaggregating the strands embodied in Marx's phrase, 'primitive accumulation', into both an historical moment – the point of separation of producers from the means of production – and a continuous process by which the institutions that protect society from the market are dismantled (De Angelis 2001, 2004, 2006) or even further as Harvey (2003) does, into discrete and ongoing processes of commodification, privatization, suppression of rights, appropriation of assets appropriation and the creation of institutions to enable these processes. Of particular application to our study is the recent work on forms of accumulation by means other than expanded production, such as primitive accumulation and accumulation by dispossession (e.g. Glassman 2006), the commodification of spaces and processes hitherto outside the 'circuits of capital', including new forms of nature, and the role of institutions in creating the conditions for global capital accumulation through 'extra-economic' means of dispossession (e.g. Negi and Auerbach 2009, 100). Finally, in asserting that acts of enclosure are often distant in time and space from the accumulation they mobilize, Kelly (2011) argues that primitive accumulation occurs not only at the first moment of establishment but also through the violence enacted upon current users in terms of their and the descendants' future accumulation possibilities. These shifts – specifically the extraction of the concept from its specific historical context, parsing of its components, understanding of it as the continual process and attention to the institutional transformations integral to those processes – are critical to our examination of how international conservation institutions establish the conditions for new forms of primitive accumulation.

We draw, in particular, on Harvey's (2003) well-cited argument that market liberalization will produce chronic crises of over-accumulation, which require the continual release of new assets that over-accumulated capital can seize and convert to profit, and build on others (e.g. Bond 2011, Moore 2011) to argue that international conservation policy is orchestrating spatial fixes for over-accumulated capital via its sanction of new commodities, markets and opportunities for speculative investment in offsets, wildlife derivatives and carbon credits. Together these constitute 'newer and more sophisticated forms [that] have emerged and often mutually constitute or at least interact with spatial enclosures' (Peluso and Lund 2011, 672), and they reflect the deepening financialization of nature. This financialization of nature illuminates the continuity in the abstraction and commodification of nature between colonial and neoliberal regimes of domination even as the sociopolitical technologies of commodification change (Coronil 2000).

As conservationists have embraced the idea that biodiversity can only be conserved by and through the market, they are enclosing nature, not only by carving out physical territories as protected areas but also by privatizing rights to nature, creating new commodities from it and establishing the markets for the exchange of these rights and commodities. Ecotourism, public–private partnerships, payment for ecosystem services, corporate social and environmental responsibility, green consumerism, biodiversity offsets, wildlife derivatives and carbon trading represent just some of the emergent forms (McCarthy and Prudham 2004, Heynen *et al*. 2007, Igoe and Brockington 2007, Castree 2008, Brockington and Duffy 2010). Conservation is increasingly marked by the production and circulation of virtual commodities, in which buyers consume images and other abstractions of nature, rather than nature itself. The Internet offers opportunities to purchase carbon offsets, endangered species and rainforest plots, while ecotourist sites and theme parks offer virtual opportunities to experience and experience idealized natures (West and Carrier 2004, Brockington *et al*. 2008, Carrier and West 2009, Igoe *et al*. 2010, Igoe 2010). These virtual experiences have material effects. Ecotourism sites, for example, are remade to reflect the ideals of Western tourists (Igoe 2010), and images become the primary source of value in, as Büscher (2010, 271) calls it, 'derivative nature,' where 'the investment of capital is focused on creating value out of meaning and images that nature and poverty (ideally) represent, rather than what they are'. Increasingly, nature is offering opportunities for speculation, for example, through carbon trading and wildlife derivatives. To return to Harvey (2003, 147), 'Speculative raiding carried out by hedge funds and other major institutions of finance capital [is] the cutting edge of accumulation by dispossession in recent times', and the environmental crisis is providing a speculative frontier for finance capitalists (Sullivan 2011).

All of these more obfuscated forms of enclosure entail the formation of not only entirely new commodities but also of new markets and supporting institutions,(e.g. Gómez-Baggethun *et al*. 2010, McAfee and Shapiro 2010). Here 'the creation of new markets in novel kinds of commodities is a moment of particular importance in the definition of new kinds of property and the expansion of neoliberal capitalism' (Robertson 2007, 503). We argue that in 'this moment' (which is often a series of moments), not only are new markets created and new kinds of property defined but also new actors are drawn together, power relations realigned and new institutions created. For example, programs such as payment for ecosystem services do not simply transfer 'equivalences'; they create value, produce new natures and landscapes as commodities and empower certain actors to accumulate from these newly created values. Again to return to Harvey (2003, 153), '[a]ny social formation or territory that is brought or inserts itself into the logic of capitalist development must undergo wide-ranging structural, institutional, and legal changes of the sort that Marx described under the rubric of primitive accumulation'.

Securing the conditions for ongoing primitive accumulations

Constant work is needed to secure Harvey's spatial fixes (or De Angelis' ongoing primitive accumulation). Even in physical enclosures, the initial conditions of enclosure and property legislation must be maintained through time and in space for the benefits of property to be realized (Peluso 2009). This work can be carried out through forcing open markets and finding new spatial fixes (Harvey 2003), enclosing the means of production (McCarthy 2004), or through the ongoing reconfiguration of institutions to disable the potential regulatory threat they pose to capital accumulation. In all of these processes, representation and narrative become critical means of securing this space as they legitimate certain claims not only to material resources but also to the authority that enables accumulation by certain claimants (Sikor and Lund 2009, Corson 2011, Peluso and Lund 2011). For example, scaling up the measurements of and justifications for conservation – through mapping global priorities and gaps, pushing for global coverage of key biodiversity areas and transboundary parks and estimating carbon reductions at a global scale so that emissions in one locale can offset those in another – have all legitimated global claims to resources and delegitimized the rights and decision-making powers of previous, and often local, users. Likewise, narratives that frame market-based solutions in moral terms by justifying the commodification of nature in terms of its potential benefit for the poor often serve to alienate the poor from their means of livelihood (Foster 2002, Grandia 2007, Büscher 2009, MacDonald and Corson 2012). As they obscure the political and social roots of poverty by defining it as an economic problem, they ultimately secure resources for those who claim to help the poor rather than the poor themselves. The CBD is a key site for the circulation of these narratives and their associated knowledge, as well as for aligning and articulating the actors that promote them (MacDonald and Corson 2012).

The alienation and abstraction of these constructions of nature and poverty from the actual natural environments and social relations that produce them are also essential to the process of creating new goods, markets and associated institutions:

'Increasingly, capitalists have tried to avoid writing primitive accumulation in "letters of blood and fire." Instead, they focus on creating the "enabling environment" for accumulation by positing neoliberal capitalism as the "only alternative"' (Büscher 2009, 91). The creation of this enabling environment entails not only alienating peasants from land or restricting their use of natural assets for future wealth generation but also securing that land or resource as a means of potential future profitability for others (MacDonald 2005, Corson 2011, Peluso and Lund 2011). Most importantly, it entails enrolling global environmental institutions and the actors that move through them in the messaging that 'there is no alternative'. As we explore below, the fact that the CBD emerged in the late 1980s, in the context of a discourse that accepted the lack of an alternative to accumulation, subsequently shaped the institution as a vehicle through which biodiversity could be articulated with new modes of accumulation.

Disabling environmental institutions

A key element of eighteenth-century enclosures was the dissolution of the institutions that could have protected people from the market, and while it is tempting to see institutions like the CBD as constituting a threat and consequently in need of similar dissolution, to do so would be to ignore the way in which, unlike its eighteenth century counterparts, the CBD is in many ways a false form of a regulatory convention that disguises a market-enabling and expanding capacity. It is a good example of what Polanyi (1944) might have seen as an institution of market society disguising itself as social regulation. The birth of the CBD, for example, lies in the dynamic struggles brought about by the emergence of post-1968 environmentalism and its potential threat to accumulation. However, rather than embrace the movement, the CBD in fact extended the lack of regulatory limits on accumulation that had originally triggered the rise of environmentalism, and from the outset, the CBD was wrapped in a cloak of neoliberal associations, which eventually led to the intensification of private sector engagement and ecological modernization that characterizes it today (MacDonald 2010a). Many conservation organizations saw opportunities to gain influence over global economic agendas by using an ecological modernization variant of sustainable development as the basis for writing the original text for the CBD, while private sector actors consolidated their opportunity to shape an emerging network of global environmental governance through the formation of the Business Council on Sustainable Development (later to become the World Business Council on Sustainable Development (WBCSD)), with the president acting as a Chief Advisor to the Executive Secretary of the UN Conference on Environment and Development (UNCED) (MacDonald 2010b).

In this context, the ratification of the CBD produced, in effect, not so much an instrument to highlight the problems of biodiversity loss, but a center of accumulation and allocation that provided institutional spaces and mechanisms to contest, define, direct and codify the project of biodiversity conservation. It configured power relations around mechanisms for achieving biodiversity conservation; and it provided a new basis for organizational legitimacy. As a result, if conservation organizations wanted to retain institutional sanction and secure a share of the diminishing material resources to do their work, they needed to be responsive to, and align with, the decisions of the CBD and the program directives of its associated financing arm, the GEF. This was even as those bodies themselves had to align with dominant political projects like the expansion of finance capitalism. Through its embrace of the market and associated transformation in environmental governance brought about by the rising influence of private institutions, the CBD became a focal point for the extension of state territorialization and associated enclosure effects. It consolidated authority to sanction what is accepted as 'biodiversity knowledge', and the resulting policy and practice helped to realize, rather than impede, accumulation processes by a new set of 'managers' and other beneficiaries. In short, the CBD provided private sector actors that had shaped the neoliberal policies of states and multilateral financial institutions for decades an opportunity to shape global environmental governance.

The subsequent critiques of the CBD are well rehearsed (e.g. McAfee 1999, Swanson 1999, Brand and Görg 2008). Primary among these is that: (1) it codifies a dominant perspective of nature as capital through its emphasis on sustainable use initiatives that, when translated into practice, means the use of *in situ* biodiversity to realize profit through the conversion of use value to exchange value; (2) it positions biodiversity as genetic material available for exchange in a global market; and (3) it explicitly recognizes that states have a sovereign right to determine access to genetic resources in their territories and to allocate the benefits from the use of those resources.

Even as the CBD was mandated to develop a program of work, much like conservation organizations, it was, from the outset, starved of the financial resources to carry out that program and became increasingly dependent on shaping that program of work in accordance with the interests of accumulation in order to secure funding. The result was a convergence of markets and their key actors with governance functions at multiple scales. In the 1990s, groups like the International Chamber of Commerce and the WBCSD began to attend (and be invited to) international environmental negotiation sessions, developed strategic partnerships and agreements with conservation organizations and effectively worked to influence government positions on CBD negotiations (MacDonald 2010b). Certain decisions made at COP8 in 2006 formalized corporate engagement in Convention processes in ways that are not open to other participants. These decisions urged national governments to invite corporate actors to participate in the development of national biodiversity strategies and action plans; pushed business representatives to participate in the meetings of the COP and other intergovernmental meetings; and perhaps most significantly:

> *Encourage*[d] national focal points, where appropriate, to include private sector representatives on national delegations to meetings of the Subsidiary Body on Scientific, Technical and Technological Advice, the Conference of the Parties, and other intergovernmental meetings, and nominate them to participate in technical expert groups ... (CBD 2006, COP8 Decision VIII/17).

The 2006 decision also committed resources to developing engagement with business by directing the Executive Secretary of the CBD Secretariat to 'compile information on the business case for biodiversity and good biodiversity practice' and to 'include the private sector as a target audience for its outreach materials.' This directive to 'engage' business, on behalf of parties, recognized that 'contributions from business and industry' could be secured if work under the convention developed tools and guidance 'on biodiversity-related issues relevant to the private sector; and '[t]ools for assessing the value of biodiversity and ecosystem services, for their integration into decision-making...' (CBD 2006, COP8 Decision VIII/17).

In many ways, the CBD was simply the latest institutional space to be enveloped by interests oriented toward the production of 'natural capital' as the 2006 decisions echoed similar decisions taken during 2003 World Parks Congress and 2004 World Conservation Congress. Nonetheless, the uptake was swift. The CBD Secretariat established and staffed a 'Business and Biodiversity Program' and a 'High Level Meeting on Business and Biodiversity' was convened in 2007 under Portugal's European Union presidency, with the full participation of actors who had set up the International Union for Conservation's (IUCN) Business and Biodiversity Initiative almost a decade earlier, and in 2007, the G8 endorsed a new program on *The Economics of Ecosystems and Biodiversity* (TEEB), formally rolled out at COP10 (MacDonald and Corson 2012). The 2008 COP8 in Bonn saw a number of states establish business and biodiversity programs and finance capitalists like Pricewaterhouse Coopers release reports on the potential utility of biodiversity as a site of capital investment (MacDonald 2010b). While it represents a moment in an unfolding process, the 2006 COP decision prepared the ground for the intensification and formal institutionalization of market actors and market mechanisms in CBD, producing subsequent COPs as stages for the performance and roll out of market mechanisms and as sites for the intensification of alignment and articulation required for the production of new natures that serve the process of accumulation under contemporary capitalism.

Contemporary conservation enclosures

Once the 2006 directive had been issued and promoted, it created a host of ancillary mechanisms and actors seeking to benefit from and extend the capacity of conservation for accumulation. Conservation organizations expanded their business and biodiversity initiatives, corporate consultants began sponsoring natural capital seminars around the world and states aligned with and reproduced hegemonic narratives of market-based solutions both in the CBD and in national policies and programs (Madsen *et al.* 2010).[1] These initiatives continue to emerge and promise to expand even more in response to 'The Green Economy' focus of the United Convention on Sustainable Development or Rio+20 meeting in 2012. In this section, we review how the CBD has served as a node for the alignments and articulations necessary for new realms of capital accumulation through the promotion of local

[1]Among many other examples, The European Commission established a technical facility to support the EU Business and Biodiversity Initiative; The German Federal Environment Ministry (BMU) partnered with the Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ) to establish a business and biodiversity initiative ("Biodiversity in Good Company") as part of Germany's development programming; the World Conservation Union (IUCN), the CBD Secretariat, and the Government of Canada partnered with Samson Belair/Deloitte & Touche Business to explore the economic potential of biodiversity; and the CBD Secretariat joined the Natural Value Initiative, the Fundação Getulio Vargas (Brazilian Business School), Fauna and Flora International and BOVESPA (the Sao Paulo Stock Exchange) to convene a program to develop a biodiversity benchmark for food and beverages.

land enclosures and virtual commodities and their markets, as well as through the realigned relationships that sustain them.

Creating incentives for physical land grabs

The CBD has been a legitimating force for the expansion of physical enclosures or conservation territories across the globe since its inception. Article 8 a–e of the original Convention on Biological Diversity called for the establishment and management of new protected area systems,[2] and expanding protected areas has long been a key indicator of conservation success (Corson *et al*. in review). However, like land grabs in general, green grabs for biodiversity conservation are increasing. In 2004, the Parties to the CBD set the target of achieving 10 percent of the earth's surface in protected status by 2010, and in 2010, they raised the target to 17 percent of terrestrial and inland water and 10 percent of coastal and marine areas. National governments, NGOs and others use these targets to justify increasing protected areas in local landscapes. For example, Conservation International (CI) led the 2010 CBD campaign to protect 25 percent of global terrestrial land and 15 percent of marine areas (for which the final CBD decision to endrose 17 percent and 10 percent represented a compromise), and immediately following the CBD/COP10, CI pushed the Madagascar government to enlarge its ongoing endeavor to protect 10 percent of its territory so as to meet the new CBD 17 percent target (Corson 2011).

Not all protected areas, of course, constituted common lands before they were established as parks, and in principle, many were and are being established for the public good. Thus, they appear at first glance not to constitute enclosures. However, as Kelly (2011) points out, the creation of private property is not necessarily a prerequisite for private accumulation. A protected area can act as a nexus for the launch of multiple commodity forms. Through their roles in securing land for ecotourism; protecting rights to genetic material, minerals or ecosystem services; transforming residents into wage labourers; selling images of pristine nature; and drawing in conservation funding, protected areas in fact launch private capital accumulation, which can be temporally or spatially distant from the physical site of enclosure. Moreover, while international donors, states and NGOs have been implicated in the purchase or expropriation of peasant land for conservation for decades, increasingly, private investors are attracted to parks as ecotourist ventures, sites of carbon credit generation through Reducing Emissions from Deforestation and Forest Degradation (REDD+) and for biodiversity offsets, which entail 'setting-aside' an alternative, biologically equivalent area, often as a protected area, to compensate for ecological damage from extraction (Brockington *et al*. 2008, Zoomers 2010). In short, even public protected areas provide a diversity of spatial fixes for private capital accumulation.

Creating new commodities and new commodity markets

REDD+ has proven to be a particularly powerful rationale for green grabs, and it is anticipated to be the 'biggest land grab in history' (Mukerjee 2009). REDD+ entails

[2]Article 8: In-Situ Conservation of the original Convention on Biological Diversity. Available from: http://www.cbd.int/convention/articles/?a=cbd-08 [Accessed 21 July 2011].

a carbon credit market for reduced emissions from avoided deforestation or forest degradation, forest conservation, sustainable forest management and enhancement of forest carbon stocks, all to be achieved to a great extent via park establishment. Both the World Bank and UN REDD program are funding REDD+ 'readiness' or pilot programs aimed at developing market-based financing mechanisms to establish the carbon market in specific sites, and according to its president, Robert Zoellick, the World Bank has set aside US$4.5 billion for potential investment in its Forest Carbon Partnership Facility,[3] and Norway is prepared to allocate up to US$500 million a year for REDD+.[4]

Even as negotiations for a post-2012 emissions target agreement have stalled in the UN Framework Convention on Climate Change (UNFCCC), numerous private actors are already benefiting from carbon trading, including via speculative anticipation of an international regulatory regime. The current global carbon market is valued at over US$ 100 billion (Lohmann 2011), with trillions of dollars in trade expected in the coming decade (Bond 2011). Bohm and Dabhi (2009) project the carbon market to be the largest derivatives market on the planet, and carbon investment funds, largely oriented toward speculation, are already managing nearly US$13 billion (Lohmann 2010, 236):

> By channelling capital to 'avoided emissions', offset investors make money by, in effect, cleaning up non-existent worlds and taking credit (literally) for their dirt not having become reality... Securitized and bundled into index funds together with oil and wheat, the carbon commodity becomes even more intricately entangled with the computer programmes of Wall Street... The equation 'offsets=emissions reductions' sanctions land grabs, destruction of knowledge, the entrenchment of fossil fuelled industries in the global North, and the development of dirtier industries in the global South. (Lohmann 2011, 652–54).

While official negotiations around REDD+ fall under the auspices of the UNFCCC, it was a central topic at the Nagoya meeting. Delegates, NGOs, IGOs and private sector representatives debated and negotiated on how to ensure that the protection of biodiversity conservation and indigenous rights remained central in the UNFCCC negotiations. Concurrently, while some actors debated the degree of overlap between high biodiversity conservation areas and high carbon areas, numerous others began articulating the rationale for protected areas in terms of their carbon sequestration potential through statements such as, 'only 13 protected areas ... could save 1 billion [tonnes of] carbon in terms of emissions in 40 years'[5] and 'The purpose of [the Peruvian Conservation Initiative for Climate Change] is to contribute to climate change mitigation through the conservation of 54 million hectares of tropical forests.'[6] Finally, many actors saw REDD+ as an avenue through which to access new funding streams for biodiversity, even to the point of arguing that, 'The worst thing that could possibly happen for biodiversity would be to fail to get agreement on REDD+'[7] (see also Hagerman *et al.* in press.). Through this embrace of REDD+ as a

[3]Global Tiger Initiative Side Event, 28 October 2011.
[4]Financing Forest Biodiversity Side Event, 21 October 2011.
[5]Role of Protected Areas in Climate Mitigation Side Event, Ecosystem Pavilion, 19 October 2010.
[6]Role of Protected Areas in Climate Mitigation Side Event, Ecosystem Pavilion, 19 October 2010.
[7]REDD+ Hour on Biological and Social Safeguards, 21 October 2010.

biodiversity conservation measure and funding stream, the CBD is both legitimating the commodity of carbon itself and helping to create the market for its trade.

While carbon trading is the most well-known emerging market for trading virtual nature, as conservation organizations and multilateral financial institutions strike alliances, the CBD increasingly provides a stage for the launch of new nature markets, including new nature derivatives, in which investors hedge against financial risks or speculate on future values encompassed in, for example, species extinction. For speculators, these commodities simultaneously offer a potential to profit from nature's scarcity and a path to a cleaner image (Sullivan 2011, MacDonald and Corson 2012). During COP10, the World Bank and World Wildlife Fund introduced the *Wildlife Premium Market Initiative* at a media-packed side event on the Global Tiger Initiative,[8] which was blessed by a drive-by visit from Bob Zoellick and an illustrious panel that included conservation establishment elites such as: Thomas Lovejoy, President of the Heinz Centre; Monique Barbut, Chief Executive Officer (CEO) of the GEF; John Scanlon, Secretary General of the Convention on International Trade in Endangered Species, Pavan Sukhdev, head of the TEEB initiative, and Environment Ministers from Thailand, Nepal, Bhutan, and Malaysia. By stimulating a wildlife market linked to the carbon market, the endeavor aims to create sustainable financing for wildlife conservation, starting with tigers. Eric Dinerstein, Chief Scientist and Vice President of the World Wildlife Fund explained: '[If] we think of REDD and REDD+ as the engine, we can think of the wildlife premium market as the turbo charge for that engine [with] the premium market bringing more life and more vitality to it.' In short, his proposal calls for a World Bank–managed Wildlife Carbon Fund, which would operate like the Forest Carbon Partnership Facility and pay governments or 'communities' for increases in tiger or tiger prey numbers, as a supplementary program to REDD+. By linking wildlife conservation as a co-benefit to REDD+, it aims to catalyze increased carbon prices by certifying certain carbon sequestration sites as good wildlife habitat and compliant with a Wildlife Standard. As with carbon, the buyers of wildlife credits have to be created or attracted, and Dinerstein's proposal suggests the issuance of wildlife premium bonds, which could be held in the portfolios of investors across the world to raise private investment (Dinerstein *et al.* unpublished). Here again, the CBD serves as a critical means of aligning actors important to the creation of financial products for circulation.

Like those advocating the Wildlife Premium Market Initiative, proponents of TEEB chose the CBD/COP10 to launch the project into the public sphere, and like carbon, ecosystem services were frequently invoked at the CBD to justify protected area expansion. First proposed by the German government in 2007 as a study on the economics of biodiversity loss to complement the Stern Report,[9] TEEB has, under the leadership of Pavan Sukhdev, a former senior banker with Deutsche Bank and head of the United Nations Environment Programme (UNEP)'s Green Economy Initiative,

[8]Self defined as 'An alliance of governments, international agencies, civil society, and the private sector united to save wild tigers from extinction.' Available from: http://www.globaltigerinitiative.org/ [Accessed 14 October 2011].

[9]Based on *The Stern Review on the Economics of Climate Change*, a study led Sir Nicholas Stern, Head of the UK Government Economic Service and Adviser to the Government on the economics of climate change and development.

taken on a life of its own, mobilizing and linking 'a group of actors focused on the pricing and costing of ecosystems and biodiversity, producing reports aimed at distinct bodies of decision-makers, and putting in place demonstration projects oriented around mechanisms to incorporate the productive value of ecosystems and biodiversity in national accounts' (Macdonald and Corson 2012, 163).

The CBD not only laid the groundwork for TEEB through a 2006 decision of the parties calling for a study on the economic valuation of biodiversity but also has institutionalized TEEB through, for example, explicit calls from its advisory bodies to develop 'capacity-building workshops, to support countries in making use of the findings of the TEEB study and in integrating the values of biodiversity into relevant national and local policies, programmes and planning processes.'[10] In this manner, the CBD/COPs have served as crucial venues for the transformation of TEEB from a study to an institutionalized mechanism, in part by attracting the attention and resource investments of potential affiliates – politicians, scientists, businesses, bureaucrats and activists. At the 9th CBD/COP in 2008, the TEEB team released the first TEEB Interim Report, and by COP10, it had released five reports/websites targeted at different audiences – 'TEEB for Ecologists and Economists', 'TEEB for Business', 'TEEB for National and International Policy Makers', 'TEEB for Local and Regional Policy' and a website for 'citizens,' entitled Bank of 'natural capital' (http://bankofnaturalcapital.com/). As just one example, by the end of the 10th COP, Brazil and India announced national TEEB initiatives. Thus, through simultaneous outreach, via both traditional and new social media, NGOs, UN agencies, media consultants, corporate sponsors and others have also sought to use TEEB to build the popular support necessary to sustain public interest in ecosystem services. In this sense, TEEB as a performative project that seeks to provide the motivation and mechanism for pricing biodiversity has relied on the CBD/COPs as vehicles to mobilize the alignments and articulations required to overcome obstacles to the realization of 'natural capital' (MacDonald and Corson 2012).

The rise of ecosystem services and carbon as rationales for and functions of conservation is intimately intertwined with an increasing focus on filling the so-called 'financing gap' created by the CBD's establishment of higher targets. In short, ecosystems services and carbon are being used to justify the expansion of protected areas, which in turn demands financing increases, which then necessitates the redefinition of protected in terms of ecosystems services and carbon in order to attract private sources of financial support. Public and non-profit actors have agreed that 'the CBD cannot continue to solely rely on official development assistance'[11] to raise the up to 45 billion that organizations like the Global Canopy Program have calculated that the CBD needs to expand its territorial ambitions to reach its new 17 percent target.[12] The consequence has been the application of market logics to redefine what constitutes 'protected' in terms of profitability and in order to attract financial investment from the private sector. At COP10, actors from across the globe showcased various models

[10]'Updating And Revision Of The Strategic Plan For The Post-2010 Period' UNEP/CBD/WG-RI/3/L.9. Available from: www.cbd.int/doc/meetings/wgri/wgri-03/in-session/wgri-03-l-09-en.pdf. [Accessed 28 May 2010].

[11]Green Development Mechanism Side Event, 22 October 2010.

[12]Financing Forest Biodiversity Side Event, 21 October 2010; see also Parker, Charlie and Matthew Cranford. 2010. *The little biodiversity finance book: A guide to proactive investment in natural capital*. Oxford: Global Canopy Programme. It is based on the goal of covering 15 percent of terrestrial ecosystems and 30 percent of marine ecosystems within the next 30 years.

of already occurring forms of private financing that ranged from revolving trust funds, invested in stocks and bonds, to private/private partnerships. According to the Conservation Finance Alliance, a network of organizations working conservation trust funds in various capacities, 50 funds are currently in operation across Latin, American, Africa, Asia, and Eastern Europe, totally US$450 million in assets, which comprise endowments, sinking funds and revolving funds (see also Corson *et al.* in review).[13] As argued elsewhere, these public–private–non-profit partnerships not only draw in private financing but also offer green sanction for ongoing accumulation practices, and new opportunities for capital expansion (Corson 2010).

Realigning critical relationships

As a critical moment in time and space, the CBD serves as a mechanism that explicitly draws actors together, exposes them to and encourages alignment with dominant ideological and material projects and facilitates the spread of those projects by articulating authoritative actors with them. From its inception, private-sector actors have secured positions of influence in policy-making venues like the CBD. However, the integration over the past 20 years of finance capital into the environmental agenda has repositioned actors in important ways, and through subsequent representations of crisis moments such as the strategic resource needs of the Convention, they have extended that reach, simultaneously shifting the terrain on which conservation policy is negotiated and producing a renegotiated order in which conservation serves capital expansion. As states align their interests with and devolve their practical authority to private investors, these actors, together, have shifted the locus of environmental governance away from the development and implementation of regulatory practice to the facilitation of market devices, including debt, as the basis through which 'nature' must secure the means of its own reproduction (McAfee 1999, Foster 2002, Hayden 2003, Cooper 2008).

Two specific restricted events held during CBD/COP10 in Nagoya point explicitly to this work. One was a day-long, invitation only, session that sought to bring representatives of major corporations, NGOs and the government to engage in a Dialogue on Business and Ecosystems. Sponsored by IUCN, the WBCSD and Nippon Keidanren, the Japanese Business Federation, the session involved multiple presentations by actors who discussed the accumulative potential of new commodity forms of biodiversity, the importance of valuation to realizing gains from 'natural capital', and mechanisms of integrating ecosystem valuation into corporate and national accounting practices. Like the release of the Wildlife Premium Market and the TEEB report, this event attracted the elite of the conservation establishment, government ministers and corporate CEOs. It ended with the production for the press of a statement of intent that had clearly been drafted in advance of the session but was made to appear as the outcome of a broader dialogue. This statement formed the basis of a partnership agreement among the IUCN, the WBCSD and Nippon Keidanren, with the expressed goals of scaling up 'biodiversity and ecosystems in public and private decision making, thereby building a shared vision of a

[13]An endowment is a fund in which the capital of the money is invested in perpetuity and the purpose is to preserve that that money forever. A sinking fund is spent down over a period of time. Revolving funds rotate in and out via loans or other kind of mechanisms (New Pathways for Conservation Finance Side Event, 21 October 2011).

sustainable economy that conserves biodiversity, builds business value and enhances human well-being.'[14]

The second was an event sponsored by GLOBE International, a non-governmental body composed of legislators from all major political parties within the parliaments of the G8, European Parliament, Brazil, China, India, Mexico and South Africa, with the support of GEF and UNEP, entitled the 'Parliamentarians and Biodiversity Forum'. Held over two days and restricted to invitees only, the forum brought together 100 legislators from around the world to 'identify the practical steps that parliamentarians could take to integrate the true value of natural capital into policy making.' The results included a natural capital action plan recommending that states adopt a 'natural capital approach' to policy-making that included, among other things: incorporating the valuation of natural capital into the framework of government accounts and instructing all government departments to prepare inventories of the natural capital and ecosystems that fall within their ambit or are affected by their policy decisions (GLOBE International 2011). The session revealed the capacity of the COP to draw legislative actors together in an orchestrated way, align them with a discourse of natural capital — increasingly shared by NGO and private sector actors — and use them as a mechanism to translate that plan into the state apparatuses of governance. Both of these cases effectively point to the ways in which alignment and articulation translate to normative practice defined and sanctioned through CBD mechanisms.

Sessions like this highlight the importance of the CBD as a vehicle for promoting the market alienability of nature. In institutionalizing market logics and social facts like ecosystem services or natural capital, the CBD becomes a space in which the conceptual basis of commodification can be articulated and circulated, the mechanisms of market exchange can be developed and those instruments or devices can be circulated so as to transform market rhetoric into actual market transactions. GLOBE, for example, was joined by other actors like the UNEP–Finance Initiative (UNEP-FI) to incorporate a new asset category – 'natural capital' – into financial decision-making.[15] The outcomes that result from this work of transformation are likely to be variable, and the cultural geographies that such attempts encounter will reshape what commodification looks like in different parts of the world. But as Radin (1996, 84) has pointed out '[d]iscourse matters for what it is, for what it brings about.' And the discourse of 'natural capital' at the CBD emerged from, circulated through, and produced social relations intent on 'bringing about' nature as a fungible object, as well as the instruments, decisions and practices needed to engage in its market exchange.

[14]Background Documents Prepared for the 2011 IUCN WCPA Steering Committee Meeting. Arboretum National, Aubonne, Switzerland, 4–8 April 2011, p. 21. Available from: http://cmsdata.iucn.org/downloads/iucn_wcpa_sc_background_documents.pdf. [Accessed 21 October 2010].

[15]As GLOBE circulates these approaches among members of cabinets, UNEP-FI does the same among the finance industry. In December 2011, for example, UNEP-FI announced a finance sector declaration on Natural Capital Declaration, which is now open to signatures: 'By endorsing the declaration, financial institutions re-affirm the importance of natural capital in maintaining a sustainable global economy, and call upon the private and public sectors to work together to create the conditions necessary to maintain and enhance natural capital as a critical economic, ecological and social asset'. Available from: http://www.naturalcapitaldeclaration.org/. [Accessed 20 January 2012].

Enlisting environmentalism in processes of primitive accumulation

In a 2008 IUCN newsletter, Bjorn Stigson, the President of the WBCSD,[16] described his organization's goal as seeking a regulatory framework that would not limit access to biodiversity but that would facilitate the development of markets and market mechanisms that offer 'new business opportunities and the chance to use ecosystems and their services to tap into previously unrealized assets' (Stigson 2008, 4). This statement reveals a particularly Lockean view of natural capital, suggesting that an appropriate regulatory mechanism is one that produces, in biodiversity, new means of realizing profit. Much as Locke's nature was 'waste' for its failure to be put to productive use, Stigson's interest in biodiversity and its governance is not so much about conserving the ecological functioning of biodiversity as it is about reclaiming the 'waste' from its unpriced services, imagining into being new forms of economic productivity, and more specifically applying intellectual, rather than physical, labor to improve nature and convert it into profit. But Stigson's view also highlights the importance of understanding primitive accumulation as process, reliant not simply on the restructuring of a common right to nature through a moment of privatization but on the continual creation and enrolment of organizations and institutional arrangements integral to those shifts.

In this paper, we have described what is in many ways the ongoing materialization of Stigson's vision, manifest in the diversity of expressions of 'previously unrealized assets' – green grabs and what we have called conservation enclosures. We have also highlighted how the creation of these 'assets' reflects a larger transformation that has taken place in international environmental governance – one in which the scientific discourse of global ecology has given way to an ontology of natural capital. This is a function, in part, of a widespread adoption of the view that market forces and economic growth are the best way to conserve biodiversity – a view that has come to dominate the discourse and practice of global conservation even as it has been contested. Increasingly, through institutions such as the CBD, conservation and other environmental organizations are engaged in overcoming obstacles to the realization of 'natural capital' by structuring biodiversity and its conservation as objects well suited to market exchange. In this way, 'environmentalism' 'has become a politics that can be enlisted, contained and directed to the interests of capital accumulation' (MacDonald and Corson 2012, 180), while simultaneously distancing contests over the authority to mediate competing claims to resources from those who live with the immediate consequences.

It is the strength of this mobilization and the containment of dissent that highlights the crux of this paper – that contemporary modes of reducing institutional impediments to capitalist expansion are as central to the production of natural capital and the development of related markets today as were the parliamentary enclosures to the eighteenth-century enclosure of the commons. In an effort to complement locally grounded case studies that have begun to reveal the social and ecological marginalization associated with 'green grabs', we explore here the systemic dimensions of nature's commodification and resulting enclosures. We find that constructs like ecosystem services, biodiversity derivatives and new conservation finance mechanisms like REDD+, species banking and carbon trading, which have

[16]Stigson is the successor to Stephan Schmidheiny, a Chief Advisor to the Secretary General of UNCED.

been created in association with and endorsed through the CBD, are being developed not in isolation from global markets and market actors, but through them. Indeed, even as the creation of the UN framework conventions provided the ability to centralize statist authority such that they were unlikely to threaten accumulation, the simple fact of their existence constitutes a consistent *potential* threat, which requires continual disabling.

Few case studies of the emplacement and ramifications of contemporary enclosure movements address the international institutions through which opportunities for accumulation are produced. Yet an understanding of how institutions like the CBD work to circulate and sanction forms of knowledge; legitimate and institutionalize associated programs; and align and articulate critical actors is integral to understanding the role of international negotiations as sites for the structuring of emergent green market opportunities and practices. This work reveals the integral role that the CBD plays in contemporary processes of accumulation that operate under the guise of conservation. As an institution born of neoliberal environmental politics and produced within the cultural logics of capitalism and the long histories of state support for the neoclassical economics that underpin those logics, the CBD has, from its inception, been a political arena that could be directed toward the extension of capital accumulation. Nonetheless, the rise of neoliberalism, with its associated privatization of state functions under neoliberalism and financialization of global markets have shifted power relationships in global environmental governance. Green grabbing is increasingly cultivated beyond the state through transnational networks of public, private and not-for-profit organizations that come together in critical moments in time and space, such as the CBD/COPs, to produce a regulatory framework that opens biodiversity to the market opportunities that actors like Bjorn Stigson seek.

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