Contradictions at the confluence of commerce, consumption and conservation; or, an REI shopper camps in the forest, does anyone notice?

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A B S T R A C T

Leave No Trace (LNT) is a United States government educational program guiding outdoor recreationist behavior on public lands. The program consists of seven principles prompting outdoor enthusiasts to "enjoy the outdoors responsibly." This essay employs a political ecology framework, comprised by critical consumption research and political economic analysis, to engage the LNT program across temporal and spatial scales. We illustrate, first, the impossibility of 'leaving no trace' even when adhering to the program's principles. Second, we describe how LNT minimizes local environmental impacts by displacing them to distant locations. Third, we illustrate how LNT obscures connections between the uses of outdoor products and their production and disposal impacts. Along with challenging notions of responsible recreation and ethical consumerism, a close examination of Leave No Trace reveals four mechanisms that produce and maintain program contradictions: the development of private-nonprofit alliances; the indirect enclosure of public conservation areas; the perpetuation of truncated notions of environmental citizenship; and the cultivation of ethical consumer subjects that shop at retail outlets like Recreation Equipment Incorporated (REI).

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1. Introduction

Each year, millions of Americans participate in outdoor recreation activities such as hiking, camping, skiing, climbing, surfing, and rafting. Involvement by recreationists with these activities is mediated by an ethical code of conduct known simply as "Leave No Trace" (LNT). Leave No Trace is a nonprofit program, a government policy and an educational curriculum designed to promote ethical principles and guide the behavior of individual outdoor enthusiasts. Over the last two decades, it has become the dominant slogan used for educating recreationists and for managing their activities on federal, state, and local lands. The basic premise of LNT is that by adhering to a short list of guidelines, recreationists can reduce their impacts on the environment, respect the experiences of others, promote safe travel, and "enjoy the outdoors responsibly" (LNTCOE, 2012a).

Leave No Trace is also part of a large and rapidly expanding outdoor recreation industry where profits depend upon technological innovation, cost reduction, and market expansion. Indeed, the emergence of Leave No Trace as a ubiquitous and noncontroversial environmental ethic (Turner, 2002)—akin to "think globally, act locally" or "give a hoot, don't pollute"—is inextricable from the growth of the outdoor recreation industry over the past three decades. Much like the adept marketing strategies of companies in the outdoor recreation industry, the LNT program's implicit message is that consumption is a prerequisite for experiencing nature. It should not be surprising, then, that instead of encouraging its followers to reduce their environmental impacts by limiting their consumption, LNT encourages more consumption in the name of conservation.

In this essay, we provide a critique of Leave No Trace and the Outdoor Recreation Industry based on theories of ethical consumerism, production networks and the commodification of nature (Havlík, 2006; Lockhart, 2006; Simon and Alagona, 2009; Cachelin et al., 2011). Using program and industry reports as well as discussions with staff members and recreationists, we also build on related critiques of outdoor recreation (Turner, 2002; Nichols, 2007), and on descriptions of the history and practice of Leave No Trace (Simon and Alagona, 2009; Alagona and Simon, 2012). In the pages that follow, we set out to achieve three primary objectives that, collectively, challenge the normative and uncritical use of space and scale (i.e., reflecting what Massey (2005) refers to as being "for" space) within the Leave No Trace Program.

Our first main objective is to describe three contradictions at the confluence of commerce, consumption and conservation that
permeate the outdoor recreation industry, and that truncate and challenge LNT’s notion of environmental “responsibility.” (1) Despite LNT’s upbeat rhetoric, it is impossible to Leave No Trace even when adhering to the program’s seven principles. (2) LNT principles that enable recreationists to avoid making local environmental impacts tend to merely displace the negative consequences of outdoor recreation to other, often distant or more dispersed, locations. (3) An LNT ethic based on consumerism obscures connections between the uses of outdoor products and their production, distribution, and disposal—with little regard for the unintended consequences of consumption.

Our second main objective is to show how the structures and practices of outdoor recreation—including both recreational activities and consumption trends—result from changing marketing strategies, production networks, technological innovations, and discourses of ethical consumerism (Fuchs and Lorek, 2005; Schor, 2004; Richey and Ponte, 2011). This system is also characterized by a feedback loop in which consumer demands generate new types of production efficiencies, profit seeking activities, product lines, and consumption imperatives (Heyman, 2004; Robbins and Sharp, 2003). The modern outdoor recreation industry organizes, and is organized by, a diverse but interconnected network of activities, processes, individuals, and institutions. Understanding the role of Leave No Trace, and the structural and practical elements of outdoor recreation more generally thus requires an integrated analysis of both supply and demand side processes.

Our third main objective is to show how the Leave No Trace program contributes to the growth of the recreation industry system in which it emerged and of which it is a part. To this end, we explore four mechanisms within the LNT program that help produce contradictions and enable them to persist: the development of corporate-nonprofit alliances; the enclosure of US public lands areas for conservation and the concomitant enclosure of extraction and manufacturing areas as sites of production (McCarthy, 2004; Nevins and Peluso, 2008; Bakker, 2007; Bridge, 2007; Robbins and Luginbuhl; Igoe et al., 2011; Klooster, 2006; Morris, 2008; Peluso, 2007; Logan and Wekerle, 2008; Robertson, 2004); the perpetuation of antiquated environmental narratives (Cronon, 1995; Braun, 1997; Davis, 2004); and the cultivation of ethical consumer subjects through marketing, education, and retail activities (Bryant and Goodman, 2004; Barnett et al., 2005, 2010; Clarke et al., 2007; Clarke, 2008; Connolly and Prothero, 2008).

In this essay, consumption and its far-reaching social and environmental consequences are of central importance. A number of scholars have examined the physical and cognitive disconnect—sometimes called “distancing” or “shadowing”—between the consumption experiences of individuals and the global commodity chains that make contemporary consumption possible (Clapp, 2002; Princen, 2005; Dauvergne, 2010). For example, “consumer footprints” and “geographies of consumption” have served as useful metaphors to connect local consumption activities to global processes of extraction, manufacturing, distribution, and disposal (Crewe, 2000; Davies, 2008; Jones, 2005; Mansvelt, 2005). Leave No Trace offers a particularly compelling subject for analysis due to the program's seven principles. (2) LNT tends to ignore the presence of a system that, in Dauvergne’s words, “creates incentives—indeed, makes it imperative—for states and companies to ‘externalize externalities’ beyond the borders of those who are doing most of the consuming.” Meanwhile, Bryant and Goodman (2004) have argued that social and environmental movements that emphasize “caring-at-a-distance” through consumer-oriented activism (see also, Smith, 1998, 2000), are weakened by their reliance on critical consumption choices. We sympathize with Dauvergne’s skeptical view of atomized conservation interventions, while at the same time agreeing with Bryant and Goodman’s critiques of the individual uncritical consumer. We advise against such dichotomous logic, however, and suggest that some of the weaknesses found in consumer-oriented activism are the result of problematic formulations concerning the economic, historical and geographical contexts of contemporary environmental problems.

This essay similarly builds on Barnett et al.’s important essay (2005) describing how product commodification and reflexive consumerism shape notions of personal responsibility and, by extension, modes of ethical consumption. According to the authors, performing ethical commitments through consumption provides a mechanism for consumers to assume rather than accept responsibility; that is, individuals acknowledge “a responsibility to act to address wrongs for which one is not, in any causal sense, liable for or to blame.” As Young (2003) notes, ethical consumption allows shoppers to obviate any direct claim of individual responsibility and instead embrace a commitment to broader forms of collective accountability. We use the Leave No Trace Program and its connection to the outdoor recreation industry to advance this line of thinking in support of a stark contradiction: as outdoor recreation consumers engage in collective ethical movements and thus assume a position that minimizes personal responsibility for environmental degradation – by, for example, becoming more likely to purchase an item simply because it is endorsed by LNT – they may actually increase their direct impacts on the global environment. While collective consumer activism has the effect of flattening responsibility across individuals and social groups, the case of Leave No Trace reminds us that responsibility over global environmental degradation is, whether individuals accept it or not, deeply uneven and closely linked to both personal choices and industry practices.

This paper should not be read as an indictment of Leave No Trace per se. As we note below, the adoption of LNT principles and practices—by hundreds of thousands, if not millions, of outdoor enthusiasts—has encouraged more responsible behavior within parks and recreation areas, and there is considerable evidence suggesting such changes have benefited these cherished places. We also understand that the environmental impacts associated with outdoor recreation are part of a system much bigger than LNT, and the program should not receive disproportionate blame for industry related degradation (Marion et al. 2011). Moreover, we are avid outdoor enthusiasts, and we each own the typical assortment of recreation clothing and gear. We also faithfully follow the basic principles of LNT, attempting to tread lightly, leave what we find, and enjoy the outdoors with respect for human and non-humans alike. Our goal with this project, however, is to show how theorizing the political economy of natural resource conservation and ethical consumerism can inform a more critical, far-reaching, and even radical approach to a wide range of activities that most people regard as benign leisure.
2. The background and structure of Leave No Trace

Leave No Trace is the principal education policy for recreation management in parks and protected areas throughout the United States. It is a central component of outdoor recreation management in lands administered by the National Park Service, U.S. Forest Service, Bureau of Land Management, and U.S. Fish and Wildlife Service (e.g., BLM, 2012). Seven core principles comprise the LNT program and seek to reduce impacts associated with the recreation activities of individuals traveling within park areas (see Fig. 1). The principles encourage recreationists to minimize interactions with wildlife and other travelers, concentrate activities on previously impacted trails and campsites, leave visited areas in the same condition that they were found, dispose of human and imported waste properly, bring appropriate gear in preparation for varied environmental conditions, and acknowledge individual physical limitations (McGivney, 2003).

Outdoor recreation in the United States grew spectacularly during the camping and back-to-nature crazes of the 1960s and 1970s. Park managers soon became concerned that the throngs of new recreationists, which the managers had welcomed after World War II, were beginning to threaten the very places those recreationists had come to enjoy (Cole, 1987, 1995). These observations led the historian Nash (1967) to famously declare that Americans were in danger of “loving wilderness to death.” In light of these developments, hundreds of federal, state, and local parks systems have adopted the Leave No Trace program, including the more than 700 units of the National Wilderness Preservation System.

The concept of Leave No Trace emerged around 1979 when James Bradley, of the U.S. Forest Service, called for an educational (rather than regulatory) approach to reducing the negative effects of backcountry recreation (Bradley, 1979; Marion and Reid, 2001). In 1993, the National Outdoor Leadership School, U.S. Forest Service, Outdoor Recreation Coalition of America, and Sporting Goods Manufacturers Association organized a summit to discuss the Leave No Trace program and its future relationship with the rapidly growing outdoor recreation industry. The following year, these groups founded a non-profit organization now called the Leave No Trace Center for Outdoor Ethics (LNTCOE). LNTCOE serves as an administrative hub overseeing LNT program activities on behalf of its governmental, non-governmental, and corporate sponsors.

It would be unfair to highlight the limitations of Leave No Trace, without first underscoring its considerable accomplishments. The LNT educational program has experienced considerable success in its efforts to minimize recreational impacts—including erosion, water quality degradation, conflicts between humans and wildlife, and the social effects of overcrowding—in parks and protected areas. Boyers et al. (2000), for example, found a direct link between low impact educational programs and environmental impacts in popular hiking and camping areas. Over the past two decades, the program has grown in size and scope and now covers a wide variety of parks and public spaces. LNT has also expanded its message by appealing to diverse audiences, from elementary age children through its Practicing Environmental Awareness in Kids (PEAK) program to culturally underrepresented communities through its LNT Connect Grant Program. These accomplishments have given LNTCOE a well-deserved positive reputation, and LNT itself has become widely accepted as a practical and uncontroversial environmental ethic (Turner, 2002). It is now one of the most recognizable environmental slogans in American culture.

3. Three contradictions of Leave No Trace

3.1. Consuming to enjoy nature

Each day, millions of Americans purchase and wear various types of outdoor apparel that enable them to enjoy scenic landscapes, commune with nature, and travel safely in wild, sometimes inclement, places. Most of these garments never reach the trailhead. Despite their intricate functional design and many technical features, they are instead worn in towns and cities like most other types of clothing. In parks and wilderness areas, however, such clothing is practically required—gone are the days of climbing mountains wearing wool sweaters and canvas shoes. Similarly gone are the days of building lean-tos for shelter out of sticks and branches. Such traditional backcountry woodcrafts, which require the collection of local materials and manipulation of local environments, have been relegated to the past in favor of high-tech, and ostensibly low-impact, camping equipment. It is thus easy to see how contemporary outdoor recreation is inextricable from a vast market that includes global chains of clothing and equipment production and that extends far beyond park or protected area boundaries.

Yet because LNT only focuses on what happens inside parks and protected areas, it obscures the more distant and dispersed impacts of consumption for recreation. As a result, it provides an incomplete account of outdoor recreation’s social and environmental consequences. A traveler can Leave No Trace—as defined by the seven LNT principles—while still participating in an outdoor recreation industry that is both expansive and complex. For example, Recreational Equipment Incorporated (REI, 2011a,b) notes on its website that, “the environmental impact associated with the creation of products is probably larger than all other impacts we have as a company.” And these impacts accumulate despite the laudable practice, by REI and other product manufacturers, of providing warranties and return guarantees on damaged, defective, and worn equipment.

Fig. 2, which shows the commodity chain of a Patagonia rain jacket, illustrates how seemingly benign consumer products can contain a bundle of hidden impacts (Hartwick, 1998, 2000; Hughes and Reimer, 2002). The rain jacket is comprised of various inputs, including fabrics, dyes, metals, chemicals, plastics, and other synthetic materials that are processed and shipped between numerous extraction, manufacturing, and storage sites around the globe.

Yet the concept of leaving no trace only applies once we use that jacket for outdoor recreation purposes. LNT seems to be telling us that we can buy 1 jacket or 100 jackets and still Leave No Trace as long as we stay on the trail, camp on durable surfaces, and don’t feed the bears. In an illuminating account of the history of wilderness ethics before Leave No Trace, James Turner (2002) has noted that to the extent “backpackers actually embrace the notion they ‘Leave No Trace,’ they risk divorcing themselves from their actions as consumers outside wilderness...dismissing larger questions of the modern economy, consumerism, and the environment” (p. 479).
Given the recent growth of the outdoor recreation industry, the ecological footprint of recreationists before reaching the trailhead is as significant as ever. The Outdoor Recreation Manufacturers Association, for example, reported that outdoor product sales rose to a staggering $10.85 billion in 2010. As Figs. 3 and 4 illustrate, membership at one of the largest recreation outlets, REI, grew from roughly $2 million in 2001 to nearly $4 million in 2009. Sales have more than doubled from $36 million in 2001 to over $80 million in 2009 (REI, 2011a,b). People are spending more money at REI, despite a slight decline in backcountry camping in National Parks over the past 30 years (see Fig. 5). Consumers appear to be buying more gear for fewer backcountry trips.

These numbers reflect a more general pattern: consumption of outdoor clothing and gear has become not only an integral part of American's recreational experiences with nature, but also, for many people, it has become an end in itself.

Consuming products to enjoy the outdoors, however, is not a new phenomenon. Some historians view the pursuit of leisure itself as an indication of a society's levels of disposable wealth and mass consumption, as well as class stratification (Culver, 2010).

In the United States, suburbanization and the rise of automobile culture fostered the growth of outdoor recreation during the New Deal and immediate post-war eras (Sutter, 2002). The remarkable growth of wilderness recreation, in the 1960s and 1970s, also could not have occurred without the aid of technological innovations in outdoor recreation clothing and equipment (Turner, 2002). Leave No Trace thus represents only the most recent approach for integrating recreation commerce and conservation—and for consumption to serve as a pathway for enjoying the outdoors.

### 3.2. Consuming to protect nature

The principles of LNT are designed to minimize environmental impacts and promote personal well-being. While LNT followers are not required to purchase particular items to achieve these goals, LNTCOE and its corporate and government partners do promote consumption by endorsing and recommending products that will enable recreationists to practice the principles of LNT. Products such as portable camp stoves are often touted as "low-impact"
compared to cooking by a campfire that uses wood gathered from the campsite area. Rather than eliminating environmental impacts, however, most “low-impact” products merely displace the negative environmental impacts of recreation to areas outside of parks and protected areas. Pollution and other impacts are thus exported from parks and preserves to the sites and spaces of extraction, production, distribution, and disposal.

Consider the Leave No Trace Principles “Plan Ahead and Prepare” and “Respect Wildlife,” which advise recreationists to “protect wildlife and your food by storing rations and trash securely.” Secure storage will ensure a reliable food supply and minimize extra bulk, “resulting in faster hiking times and less fatigue,” while protecting wildlife from becoming habituated to human food. LNT-COE adds “most food should be removed from its commercial packing and placed in sealable bags before packing your back-packs” (LNTCOE, 2012b). To reduce wildlife-attracting odors, recreationists may choose to double bag their rations. In some areas, bear-proof canisters should be used to provide a further layer of security. Leaving no trace thus requires that recreationists double or even triple their packaging waste and, in some instances, purchase heavy-duty equipment.

Just as extra food packaging protects wildlife, LNT’s “Plan Ahead and Prepare” principle advises travelers to “carry adequate water or a way of purifying water from natural sources” (LNTCOE, 2012b). Using water filters can help safeguard travelers from the ill-effects of giardia lamblia, cryptosporidium, and other harmful microorganisms. LNT principles encourage recreationists to protect water quality by camping and disposing of human waste away from water sources. But they also promote the purchase of additional materials and equipment in the absence of a satisfactory

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**Fig. 5.** United States National Park Visitorship (1979–2009).

**Fig. 6.** Comparison of campfire and portable stove impacts.
solution for addressing the root causes of water quality problems (Szasz, 2007). Ironically, recent research has shown that, in parks and preserves throughout the American West, giardia and other agents of waterborne illnesses are not nearly as common as scientists, managers, and land users had suspected (Carle, 2004). In many such areas, water quality remains high, thus rendering complex and expensive filtration systems unnecessary.

The principles of LNT also instruct recreationists to “choose equipment and clothing for comfort, safety, and Leave No Trace qualities.” A wide array of clothing options is now available to protect wearers from sun, wind, water, and insects. Tents and camp chairs are also suggested, while the construction of “lean-tos, tables, chairs, or other rudimentary improvements” using local materials is discouraged. For example, LNTCOE notes that “the cutting of boughs for use as sleeping pads creates minimal benefit and maximum impact. Sleeping pads are available at stores catering to campers” (LNTCOE, 2012b). To follow the principles of LNT, recreationists are “routed” through retail outlets where they emerge as consumers outfitted for the challenges of the outdoors.

The LNT principle “Minimize Campfire Impacts” advises against building campfires in favor of alternative cooking methods. LNTCOE suggests that recreationists “Be Considerate of Other Visitors” by minimizing use of local wood so that “its removal will not be noticeable,” and so that regrowth can “keep pace with the demand.” Campfires in alpine areas and other fragile environments can accelerate biomass decomposition, reducing scarce resources in areas already characterized by low biological productivity and nutrient availability. Campfires can also scar open landscapes, and they raise the risk of destructive wildfires. In response to these concerns, many parks and wilderness areas have implemented campfire bans in certain areas or seasons. Instead, as a general rule, LNTCOE suggests visitors reduce their dependence on campfires for cooking by substituting them with camp stoves that, if well designed, should last many years. In fact, LNTCOE’s (2012b) “Meal Planning Guidelines” state unequivocally that “a stove Leaves No Trace.”

This claim—that “a stove Leaves No Trace”—utilizes a remarkably nearsighted scale construction that privileges the site of use over sites of extraction, manufacturing, distribution, and disposal (see Fig. 6). Although camp stoves—like bear cannisters, water filters, camp chairs, tents, protective clothing and other equipment—may reduce impacts inside parks and wilderness areas through repeated use, they clearly leave traces elsewhere. In this way, a host of ‘traces’ are displaced away from parks and protected areas, and towards regional and global locations along each product’s supply chain.

3.3. Consuming to support saving nature

As part of the program’s marketing and outreach campaign, corporate sponsors can donate a portion of their proceeds to LNTCOE programs. Fig. 7 illustrates one of many shared marketing agreements between LNT and its various outdoor retailer partners. Here, shoppers are told to shop at The North Face “and we’ll donate 5% of the total amount of your purchase to Leave No Trace.”

LNTCOE clearly benefits financially from partnerships that promote consumerism in the name of conservation (see Section 4.1). By encouraging consumption as a means of saving nature, however, issues of over-consumption and its environmental implications go unaddressed, disguised, or even dismissed. Here, the mobilization of LNT advances the causes of market expansion far more than it meets the needs of the environmental crisis it is ostensibly designed to correct. Only 5% of the purchase price goes to LNT while 95% of proceeds support industry corporations. And because certain benefits—such as increased education and awareness—are difficult to monetize, it is unclear how the 5% actually translates into environmental stewardship. What is clear is that the vast majority of benefits these campaign proceeds generate will be directed towards a suite of LNT activities in parks and protected areas, and not in areas enclosed for production purposes—despite both areas being closely associated with the outdoor recreation experience.

Richey and Ponte (2011) use the term “causumerism” to describe how companies leverage environmental causes to boost product sales by donating money to protect the environment for each product sold. While these causes may be seductive, they also effectively delink the relationship between capitalist consumption and environmental degradation by suggesting that increases in the former can mitigate the latter. A critical assessment of these marketing strategies leaves one asking whether consumption is being used as a mechanism to promote LNT, or whether LNT (like other similar programs) is being used to promote consumption. Attempts by LNT to articulate an ethical identity and then offer a consumerist pathway to fulfillment (Connolly and Prothero, 2008) again highlights a recurring tension within the environmental movement where increased consumption is leveraged to promote conservation.

4. Program contradictions and the maintenance of LNT

In 2010, the Leave No Trace Center for Outdoor Ethics introduced Bigfoot, the mythical human-like beast from the forests of the US Pacific Northwest, as its new mascot. The furry creature now appears on the organization’s t-shirts, stickers, Website, brochures, as well as in costume at LNT-related events. For LNTCOE, Bigfoot represents a clever contradiction: he treads so lightly that, despite his great size, people are unable to locate his tracks. The creative logo campaign uses an animated image of Bigfoot to declare, “Leave No Trace: I’ve been doing it for years!” (LNT, 2012). Yet the program’s use of Bigfoot underscores a larger, unintentional contradiction: only an imaginary traveler, completely disconnected from time and space, can leave no trace.

Dauvergne (2010, p. 7) has argued that because environment and sustainability initiatives often encourage increased consumerism, “they do little to influence the drivers of consumption” and much of their “so-called ‘progress’ is incremental, local or
temporary." Leave No Trace exemplifies this tendency by masking the global commodity chains that make it possible to follow LNT principles in parks and preserves, encouraging the purchase of supposedly "low-impact" outdoor products, and by implementing creative marketing campaigns that appeal to the ethical concerns of environmentally-minded outdoor recreationists.

Dauvergne and others have not, however, adequately addressed the various social and economic mechanisms through which these contradictions are maintained and reproduced. The conceptual limitations of LNT present an opportunity to understand how efforts to both conserve and commodity nature are reconciled in practice. Four factors contribute to the maintenance of LNT despite its inherent contradictions. First is the corporatization of Leave No Trace and the influence of recreation industry representatives in program decision making. Second is the process of re-appropriating conservation areas to support consumption activities and displace commodity production to distant locations. Third is the perpetuation of conservation narratives and ethics that privilege "protected" areas over other landscapes. And fourth is the formation of Leave No Trace subjects through ethical consumerism.

4.1. The corporate brand

To understand how consumerism became a crucial part of LNT's effort to support and achieve its conservationist vision, one must begin by outlining the relationship between Leave No Trace Center for Outdoor Ethics and members of the outdoor recreation industry. Leave No Trace has had close ties to the industry since the early 1990s. In 1993, for example, the Outdoor Recreation Coalition of America (ORCA), the Sporting Goods Manufacturing Association (SGMA) and other industry representatives helped aid the formalization and initial expansion of the program through the establishment of the Leave No Trace Center for Outdoor Ethics (Marion and Reid, 2001). Today, the list of LNT corporate patrons and partners includes many of industry's most prominent corporations, such as Coleman, Keen Shoes, L.L. Bean, Recreation Equipment Incorporated (REI), Subaru of America, The North Face, Eddie Bauer, Chaco Inc., and popular magazines such as Outside and Sea Kayaker (LNTCOE, 2012c).

Partners can donate up to $12,000 per year to LNTCOE depending on company sales, and Patron Corporate Partners may give $25,000 and up to the program (LNTCOE, 2012d). Donations support various LNT initiatives, grant programs, and educational activities. They also support LNTCOE-coordinated service projects, such as restoring denuded camping areas and removing exotic plants. In short, corporate sponsorships make LNT programs possible.

In exchange for their donations, corporate sponsors may use the LNT logo for marketing, communications, and education purposes. They can also use the seven principles and accompanying text in corporate materials. Partners can co-brand programs with LNTCOE and have their corporate logos appear on LNTCOE's website and annual report. Partnership status thus allows corporate sponsors to engage in, and publicize, a widely accepted, non-controversial form of environmental activism. Doing so improves their public image as a "green" company.

Sponsorship also imposes potential limitations. The structure of LNTCOE funding and corporate sponsorship suggests strong impediments to (a) expanding the program's core message beyond the boundaries of parks and preserves, and (b) developing a consideration of environmental impacts that include those occurring along the commodity chain of outdoor products. Actively promoting reduced equipment consumption as part of its message could undermine the financial interests of corporations supporting LNT. Indeed, quite the opposite occurs. Industry partners are using Leave No Trace, like so many other industry initiatives, as a form of corporate branding and as a strategy to attract consumers and increase sales.

4.2. Indirect enclosure and displaced degradation

The case of Leave No Trace demonstrates how areas set aside for conservation are re-appropriated and mobilized for profit. A considerable amount of scholarship has articulated "enclosure" as a process through which market-oriented development policies circumscribe and enroll resource landscapes for commodity production (McCarthy, 2004). This involves integrating formerly public resources within private property and market regimes to generate profits for land owners and other market actors (e.g., Bakker, 2007; Bridge, 2007; Robbins and Lugubuhi; Igoe et al., 2011; Klooster, 2006; Morris, 2008; Peluso, 2007; Logan and Wekerle, 2008; Robertson, 2004).

Rather than expand private property rights or open access regimes through direct resource use and on-site extraction activities, this essay demonstrates how, under LNT, the commodification of nature is achieved indirectly. Under this form of enclosure, conserved nature in protected areas becomes part of the resource stock appropriated for commodification. Meanwhile, natural resources in distant locales are captured as the material basis for supporting production activities within the recreation industry. This bifurcated development signals the manifestation of a "spatial fix", as negative externalities are exported to provisioning landscapes in a manner that underpins, and is reinforced by, a hierarchy of moral commitments to land and life around the world.

In this system, outdoor equipment manufacturers leverage public parks as spaces to be explored using their products. The environmental and social impacts seem benign in these areas because extraction, manufacturing, and waste disposal activities are displaced to oftentimes far-flung sites located along equipment commodity chains. Distant extraction and manufacturing zones are enclosed as sites of production and thus incur the brunt of environmental degradation. In this way, the process of enclosure is indirect, as protected areas provide corporations with wild and attractive areas to market to potential consumers, while exploitative production practices are displaced to distant regions far removed from the "protected areas" recreationists long to explore.

Indirect enclosures help circumvent incongruities that may emerge at the intersection of commerce and conservation by averting the "second contradiction" of capitalism, in which economic development erodes underlying means of production, leading to a slow decline in efficiency and productivity and eventually to a stalling of economic growth (O'Connor, 1988). This is achieved first by removing protected areas from global circuits of capital, then by reintegrating them indirectly as sites to be innocuously consumed. Meanwhile, given the flexible and mobile nature of contemporary capitalist production (Brenner and Theodore, 2005; Harvey, 2010), manufacturing activities along these global commodity chains will persist beyond local crises by establishing new spatial fixes and shifting to new areas of resource exploitation. All the while, the sanctity (and productivity) of conservation enclosures is maintained for future generations of recreationists.

4.3. Ethical "slippage"

Leave No Trace's greatest conceptual strength is also its greatest weakness. Its appeal to saving wild places has proven extremely effective at attracting corporate partners and a loyal following among outdoor recreationists. Yet, when compared with other environmental ethics, the LNT program appears to lag behind more "relational" concepts such as "think globally, act locally" that effectively shift environmental discourse towards notions of interconnectedness and global citizenship. The seven principles of Leave
No Trace adopt a nearsighted agenda for conservation that reproduces the scalar limitations of the United States wilderness ethic. By limiting its ethical purview—and its definition of “trace”—to parks and protected areas, LNTCOE tends to obscure important connections and truncate the scope of its ambitions.

Many hikers and campers will recognize that no park or preserve is pristine; all such spaces reflect long histories of human labor, competing agendas, and debates over the purpose of land use and management (White, 1996; Havlick, 2006). Yet practicing ‘Leave No Trace’ remains appealing because it conforms to, and perpetuates, the conception of parks and preserves as pristine islands isolated from human impacts (Lewis, 2007). Leave No Trace offers a code of conduct calibrated to the limited geographic scope of parks and wilderness areas. Two decades of LNT educational materials (see Fig. 8) reflect the program’s tendency to reproduce the idea that “pristine” areas exist and should be privileged for protection, and that indigenous peoples and pioneers did not substantially alter their environments.

The case of Leave No Trace thus illustrates how scale constructions slip, or pass uncritically, from one land use ethic and policy to the next (Delaney and Leitner, 1997). Once the claim is made that pristine areas exist, then LNT principles are justified to maintain these places in a “natural” state. Building upon Cronon’s (1995) widely cited argument that the “trouble with wilderness” is its privileging of wild nature over environments close to home, this essay suggests instead that LNT principles reinforce a mindset where wild places are privileged over resource-rich environments far away from home. Yet again, we can see how discursive artifacts in policy and the material implications of policy intertwine and emanate from the uncritical treatment of space and scale (Simon, 2011).

4.4. Consumer subject formation

The outdoor recreation industry integrates the practice of consumption with the practice of recreation through a powerful form of cultural capitalism that enables the industry to generate consumer subjects. One example is through strategies of perceived and planned obsolescence that attract recreationists and implore them to keep consuming and performing their identities as outdoor recreationists. Beginning in the 1970s, a variety of consumer goods, composed mainly of synthetic plastic materials derived from petroleum products, became an essential part of the camping and hiking experience. Foam sleeping pads, GORE-TEX jackets, nylon tents and clothing, portable cooking stoves, Vibram rubber soles, and other technological innovations proliferated, resulting in an expanded market for outdoor products (Simon and Alagona, 2009). The industry’s “go light” movement that

Fig. 8. Panels from US Forest Service Leave No Trace Manual (1992).

Fig. 9. The marriage of commerce and recreation: in-store climbing walls.
encourages hikers to buy the lightest equipment available, is yet another recent example of this trend. The logic behind “go light” is that such purchases help reduce extra weight and environmental impacts when recreating outdoors (Nichols, 2007). Of course, there is nothing “light” about buying more simply because it weighs less.

Also contributing to the formation of consumer subjects is the maintenance of retail spectacles at stores like REI (Biehler and Simon, 2011). Climbing walls, weather rooms, artificial trails, and glossy large-format images of people outfitted with the latest equipment entice consumers to imagine themselves as more skilled recreationists in more exotic settings. Retail outlets have become more than just sites of recreation commerce. They also represent the complete enmeshment of recreation in commerce. Here, the formation of outdoor recreation consumer subjects proceeds in its purest form—recreationists do not even need to leave the retail store (see Fig. 9 for example).

The Leave No Trace program also enhances this form of recreation-oriented cultural capitalism by conjoining acts of consumerism and charitable giving. As Zizek (2009) has persuasively argued, the ability of manufacturers to leverage ethical causes can be a powerful tool for cultivating consumer identities and maintaining a loyal consumer base. Through various marketing strategies, the outdoor recreation market uses the Leave No Trace brand to shape consumer-purchasing decisions. In cases where consumers are given the opportunity to donate directly to LNT programs, for example, consumption decisions reflect the ethical identities shoppers buy into as much as they reflect the actual appeal of the products they buy. Thus, as part of this cultural capitalism, the act of shopping allows individuals to buy their redemption as consumers by contributing charitably to environmental conservation causes (Bryant and Goodman, 2004).

A similar logic applies to fair trade and product certification labels that endorse goods with a seal of sustainability and thus harness the power of a concerned consumer base capable of raising finances for charitable causes (Connolly and Prothero, 2008). These appeals to consumers may be complemented by coordinated activities with influential regulatory bodies (Clarke, 2008; Barnett et al., 2010). Yet, as Eden (2011) has noted, such eco-labels may operate “within the existing capitalist system” rather than present “a stronger challenge to that system itself” (p. 169). Consumers, like those participating in the outdoor recreation industry, are compelled to participate in shopping activities for reasons that are “larger than themselves,” but by doing so they tend to make their environmental footprints even larger. LNT’s Bigfoot mascot would likely not approve.

5. Conclusion

Consider, for a moment, a small group of friends ambling down the trail in the Sierra Nevada Mountains of California. Enjoying the late afternoon sun on their backs and the smell of Juniper Trees alongside the trail, the collection of hikers enters into a large meadow dotted with small alpine lakes in search of a campsite to spend the evening. It is early fall, and the sun quickly descends over the granite ridgeline to the west, casting a long shadow across the meadow. After choosing an appropriate site, members of the group set up camp while being careful not to step on native vegetation, remove items from the landscape, leave any waste or harass local wildlife. According to the LNT program, we are to believe this collection of hikers leaves no trace because they responsibly adhere to the program’s seven principles. And because they do not generate any discernable imprints or ‘traces’ on the landscape, it’s as if they were never there.

Meanwhile, it is not unreasonable to imagine that members of this small group paid visit to an REI or similar outlet in the weeks and months leading up to their camping trip. After all, like other lifestyle activities—from cooking and gardening to travel and entertainment—acts of consumption play a central role in outdoor recreation. And yet, because LNT does not consider these consumerist activities to be part of the recreation experience, any related environmental impacts are viewed as irrelevant. There is no space to record these impacts on the proverbial ledger of “traces”. They seemingly dissipate into thin air.

So where and when do REI shoppers actually exist when leaving no trace in backcountry settings? They are not in the park or protected area. Nor are they embedded within a network of recreation industry activities, transactions, and commodity flows. What does become of this small group of recreationists? Through a series of contradictory logical progressions, LNT has created a scenario where, for a moment in time, they do not exist at all; the hikers are, within the ontological province of LNT, at once, no where. They become Bigfoot. And this is precisely the problem with Leave No Trace and the idealized subjects it seeks to produce: Bigfoot does not exist.

To be clear, the Leave No Trace program has been (and remains) an important and effective means of protecting fragile environments from potentially deleterious human activities. Our objective in this essay, therefore, has not been to undermine LNTCOE’s significant and praiseworthy accomplishments. Rather, we have sought to identify some of the contradictions within Leave No Trace and encourage the program to do more. We have argued that leaving no trace in backcountry environments is accompanied by, supported through, and at times dependent upon considerable consumption activities. Moreover, this essay suggests that it is impossible to Leave No Trace, and that to do so would be to escape culture, to escape society, to escape economy, to escape geography, and to escape history itself.

Several decades of outdoor recreation growth illustrate how production and consumption activities are mutually constitutive. Take the outdoor retailer “The North Face” as an example. The North Face provides recreationists with technological innovations required to match the company’s slogan and corporate challenge to “Never Stop Exploring.” At the same time, these technologies are developed in response to evolving manufacturing advancements, consumer demands, and demographic trends in outdoor recreation. The modern outdoor recreation industry thus influences, and is influenced by, a series of consumer priorities, production activities, environmental ethics, technological innovations, and market growth imperatives.

The growth of the outdoor recreation industry and associated activities has facilitated the development and expansion of Leave No Trace programs. Yet given how nature is commodified within the outdoor recreation industry, LNT’s intervention unintentionally contributes to the very problems it seeks to address: recreationists always leave traces, LNT principles displace most impacts outside parks and preserves, and consumerism functions as a pathway for generating revenues that sustain the LNT program with little regard for the supply-side and disposal “traces” resulting from ethical consumption campaigns.

This essay, however, has endeavored to do more than show that forms of outdoor recreation consumption and production are mutually constitutive, or that the Leave No Trace program contains conceptual flaws in its program of activities. This discussion has also articulated four ways that production and consumption activities converge to support the Leave No Trace program and uphold its nearsighted vision and scope of intervention.

First, LNT program objectives must be understood as a byproduct of the close relationship between the Leave No Trace Center for Outdoor Ethics and members of the outdoor recreation industry.
who use the program logo to enhance product sales. For LNT, a campaign that implores recreationists to consider, and minimize, their consumption activities could threaten the financial bottom-line of its corporate sponsors. Second, the Leave No Trace program and its retail partners leverage designated parks and protected areas as unique and desirable locations to be explored using their merchandise. This form of enclosure—where recreation areas are enclosed as sites of commodification, and extraction and manufacturing zones are enclosed as sites of production—maintains the ecological integrity of protected areas that outdoor retailers market to potential consumers. The conservation-commerce alliance under the LNT program is sustained precisely because it is able...
to avoid any decline in the economic “productivity” of protected areas. Third, consumers are provided with a vision of “trace” that conforms to traditional conceptions of the American wilderness ethic. This approach privileges protected areas for conservation by defending (and thus separating) them from outside human threats. As a consequence, LNT does not challenge program adherents to go beyond protecting designated recreation areas. Nor does the program implore followers to promote the kind of interconnected sense of environmental citizenship that would link practices of individual consumption with structures of global production. Fourth, efforts by Leave No Trace to address the broader impacts of recreation-oriented commerce are obviated because recreation and the LNT program have become inseparable from retail activities. To become an outdoor recreationist, one is seduced by marketing campaigns, ethical appeals and an array of product innovations. To become an outdoor recreationist is to become an outdoor recreationist consumer. This form of cultural capitalism—where lifestyles and ethical positions are performed and substantiated through acts of consumerism—presents a significant challenge to the belief that increased consumption is actually antithetical to Leave No Trace.

Shopping for outdoor clothing and equipment has become as much a part of the American recreation experience as hiking, rafting, or camping. It is therefore important to recontextualize notions of the “recreation experience” to include activities occurring “from cash register to campground” (Simon and Alagona, 2009). Efforts to minimize recreation-oriented “traces” should thus confront choices and behavior occurring within outdoor, retail, and even domestic settings. For individual recreationists, Leave No Trace as an idealized goal begins not at the boundaries of park and protected areas, but at home. Here we emphasize LNT as an idealized goal because leaving no trace as an absolute outcome can never actually be achieved.

Finally, insights illuminating contradictions at the intersection of commerce and conservation extend well beyond this case study. Over the past two decades, the outdoor recreation industry has experienced considerable growth while backcountry settings in the United States have benefited from greater levels of environmental protection. But markets also leverage environmental stewardship in a manner that frequently undermines larger goals for the environment. The case of Leave No Trace thus brings into sharper relief contradictions that occur at the intersection of commerce, consumption and conservation. The important environmental question is not how to avoid leaving a trace. Rather, a more sophisticated line of questioning asks what kinds of traces we want to leave, and at what geographic scales. Yes, parks and preserves are good places to begin this discussion. However, given that profit margin and market growth imperatives pervade and influence corporate behavior, non-profit decisions, and the choices and ethical positions of individual consumers, they are inadequate places to end it.

We offer an advertisement by Patagonia and it’s “Common Threads Initiative” (see Fig. 10) as a provocative step towards advancing this conversation and developing an honest and inclusive approach to reducing our environmental ‘traces’ – an approach that integrates consumer and industry activities and responsibilities across space.

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