

Gathering in Thoreau's backyard: nontimber forest product harvesting as practice

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Understanding of the gathering of nontimber forest products (NTFPs) in woodlands has focused heavily on politics surrounding public lands and harvester communities. Yet forest gathering may be far more universal. This paper reports the results of a survey of residents in New England, querying whether people gather wild things and for what purposes. The results suggest that gathering in New England, and elsewhere in the developed world, is not restricted to a unique type of community or economy, but instead is a form of practice. Those analytical approaches to NTFPs that seek to produce 'alternatives' to the dominant economy may therefore ironically work to reinforce a capitalocentric view of daily life.

Key words: *New England, nontimber forest products, alternative economy, natural resource management, usufruct, land policy*

Introduction

It is increasingly apparent that forests are more than trees. The recognition that forest materials, other than timber, are extracted from forests has led to a belated shift in the attention of managers and scholars. That such harvesting is widespread and includes gathering in places as far-ranging as temperate United States (Richards and Creasy 1996), tropical Ecuador (Svenning and Macia 2002), Amazonia (Hecht and Cockburn 1989), Canada (Duchesne and Wetzel 2002) and arid India (Robbins 2001) has come to be viewed as non-remarkable. Nontimber forest product (NTFP) research is now an academic and policy regime in its own right, fuelling a rethinking of the uses, diversity and function of forested lands. Challenging the tree-centred and industrially-oriented management regimes of forestry professionals, gatherers of mushrooms, fuelwood, medicinal bark and other biotic products have become progressively more prominent (Emery *et al.* 2004).

But the motivation and political and economic implications of all this gathering remains unclear. What is the position and role of gathering wild things on and within the wider population and economy? How do NTFPs matter to the larger polity, if at all?

In Great Britain, interest in NTFPs grows in part out of interest in the potential for supplemental income for rural communities, coupled with concerns about the ecological sustainability of forestry. Thus, uses of native plants and fungi have been catalogued and assessed in Scotland (Dyke and Newton 1999; Dyke 2001; Milliken and Bridgewater 2001 2004), Wales (Wong and Dickinson 2003), and England (Sanderson and Prendergast 2002). An emerging secondary emphasis stresses the social values, ethics, benefits and policy of gathering NTFPs (Emery *et al.* 2006b; Dyke 2006).

In the United States, investigations and characterisations of NTFP harvesting have focused predominantly on the conflicts that emerge where large numbers of harvesters enter and use public lands to harvest

economically valuable goods. This has meant a focus on large public land areas, especially in the West, upon populations in these regions that gather products on a large scale, and upon well-organised trade networks. These communities frequently find themselves at odds with conventional forest management regimes that stress industrial production systems, specifically large tree felling (Hirt 1994). In short, in the United States, a picture is forming of nontimber forestry as being defined by *communities* of harvesters, participating in an alternative *economy*, engendering conflicts between *state and individual* uses and values, and between *global* industry and *local* needs, especially in the Pacific Northwest.

As valuable as such work has been, far less is known about the gathering of forest materials more generally. Specifically, NTFP research has not yet examined harvesting as an activity amongst larger populations, especially the highly urbanised populations of the United States north and east, where people live further from vast public lands. As a result, key questions remain unanswered. Does NTFP gathering exclusively or predominantly take the form of 'product' gathering for economic use and exchange, rather than personal, religious or social purposes? At what rate does it occur in the larger population? And what is the demographic profile of gatherers in general, relative to non-gatherers? Behind these questions lie more fundamental ones. To understand the way we together negotiate the nature/society interface, itself increasingly understood to be an imaginary modern boundary (Latour 2004), examining environmentally-related behaviours of post-industrial people becomes essential.

This paper reports the results of a random-sample, general-population survey of residents throughout the New England states of Massachusetts, Vermont, New Hampshire and Maine, querying whether people gather wild plants from the environment around them and for what purposes. Rather than studying harvester communities, therefore, or using a case study approach to a specific context, the study seeks to answer the questions described above by assessing the rate, demographics and purposes of harvesting.

The study builds on and complements previous surveys, which suggest that significant proportions of many populations gather NTFPs. Studies in Scotland (Emery *et al.* 2006b; Hislop *et al.* 2006) and across Great Britain (Forestry Commission 2005) have reported gathering of NTFPs at rates between 23

per cent and 27 per cent of the total population, including a range of socioeconomic and employment groups, and a vast majority (~83%) reporting collection for strictly personal use. A number of previous surveys in the United States have included questions about informal harvesting of berries and mushrooms (Cordell *et al.* 2004), wild foods (Palmer 2000) and other products (Palmer 1998), on both public and private lands (Butler *et al.* 2005). A recent nationwide survey revealed that some 14 per cent of lawn owners consume wild plants (e.g. dandelions) from their own lawns (Robbins and Sharp 2003; Robbins 2007).

These results suggest that participation in gathering activities is common to many populations outside of the more active interest communities associated with economically valuable NTFPs, spanning populations from urban to rural. However, the rate of participation and socio-demographic characteristics of gathering within the larger US population remain obscure. This study, funded by the US Forest Service to help understand diverse forest constituencies, provides the first attempt to survey the general population of a region in the United States about their harvest and use of all types of nontimber materials. We refer to these plant parts and fungi throughout the work as 'nontimber forest products' (as commonly used among Anglophone researchers and policymakers), but also use the term 'plant materials' (following Turner 1998), which we feel removes stress on the economic connotation of 'products' and so more adequately accommodates the actual range of gathering practices.

The next section reviews the body of research on nontimber forest product gathering in the United States, stressing the way efforts of previous research have been directed at revealing alternatives to industrial timber economies. In the third section, we review our methodology, describing its inherent strengths and limitations. Part four reports the results, which suggest that participation in the gathering of nontimber materials by the general population of New England is not uncommon. Furthermore, while some differences are evident, the demographics of gatherers are similar to the population in many regards. Finally, only a tiny fraction of the total number of harvesters participate (as harvesters) in anything that might be described as an organised economy.

These results, we suggest in our discussion, raise questions about how researchers and managers think about gathering and 'alternative economies'

more generally. Drawing on the work of Michel de Certeau (1988), we argue that gathering is not a unique type of community or economy, but instead a form of *practice*. So too, we argue that traditional analytical approaches to NTFPs, though extremely valuable, may ironically work to reinforce a capital-centric view of daily life (following Gibson-Graham 1996), specifically because they seek to produce 'alternatives' to the dominant economy. In the process, they may overlook the non-capitalisms that are so much a part of life all around us.

Characterising US nontimber forest product harvesting

The genealogy of US NTFP literature can be traced to a moment when conflict in the Pacific Northwest (the states of Washington, Oregon, northern California and Idaho) dominated national forest policy, constructing it as a contest between regional economy and ecology. During the 1990s, increasingly visible harvester communities in commercial NTFP industries pressed for access to forests (Schlosser and Blatner 1995; Hansis 1996; Richards 1997). Grounded in this context, the US NTFP literature has been driven by the hopes and fears inspired by commodification of plant materials and fungi. Although some research is ongoing elsewhere in the United States (Emery 1998; Jahnige 1999; Chamberlain *et al.* 2002; Emery *et al.* 2003 2006a), a majority of the literature and national policy on NTFPs is a direct response to late twentieth-century developments in the Pacific Northwest (Love and Jones 2001; Carroll *et al.* 2003).

Public lands constitute 31 026 000 acres, or approximately 60 per cent of the 51 612 000 acres of forests in the Pacific Northwest (Smith *et al.* 2001), and are a key source of NTFPs in the region. The US Forest Service and Bureau of Land Management, which manage 22 352 000 and 3 365 000 acres, respectively, began to concern themselves with commercial NTFP harvesting in the early 1990s. Echoing developments in international conservation a decade earlier, NTFPs appeared to offer the prospect of reconciling two goals that seemed pitted against each other in the prevailing crisis – forest conservation and rural development (Hagen *et al.* 1996; Crook and Clapp 1998; Hagen and Fight 1999; Love and Jones 2001; Emery 2002). As environmental opposition to logging increased, NTFPs seemed to represent a sustainable livelihood for communities whose economies traditionally depended on

extractive forestry (Thomas and Schumann 1993; Wetzel *et al.* 2006).

NTFPs also represented a management challenge. As federal policy shifted from production-oriented sustained yield management to science-driven ecosystem management (Love and Jones 2001), the dearth of scientific literature on NTFPs was seen as an impediment to sound policy. Forest Service scientists, buttressed by academic scholars, began to undertake studies of the ecologies and economies of commercial fungi (Molina *et al.* 1993; Liegel *et al.* 1998), medicinals (Vance 1995) and floral greens (Blatner and Alexander 1998; Freed 2001; Lynch and McLain 2003). These studies often emphasised tensions between gatherers and land managers (Wang *et al.* 1996; McLain 2000) and conflicts between gatherers along lines of residence and ethnicity (Richards and Creasy 1996). Whether serving a public agency client or taking an openly critical approach (and more than a few studies have attempted to do both), this literature has been overwhelmingly focused on public lands in the region.

In keeping with rural development themes, NTFP commodities and gatherer economies have been the substantive focus for nearly all of this research. Motivated by environmental justice concerns (McLain 2002) and responding to the paradigm crisis in temperate forestry (Love and Jones 2001), researchers have been concerned with rendering visible the economic contributions of NTFPs. Theories of livelihood and the informal economy have been mobilised to establish the legitimacy of productive activities outside the scope of traditional forest economics (Emery 1998 1999; Alexander *et al.* 2002), using detailed ethnographic case studies to emphasise the importance of NTFPs to household incomes (Emery 1998; Hinrichs 1998). Several researchers have noted that economic calculations are inadequate to capture the full range of values that NTFPs play in gatherers' lives (Dick 1996; Emery 1998; Hinrichs 1998; Carroll *et al.* 2003). However, the relative attention to NTFP commodities versus that accorded to nonmarket uses suggests that exchange values have a privileged standing in the literature.

Defining gatherer communities and defending their rights of access to NTFPs has been another common effort. Identification and categorisation of gatherers, while recognised as a strategy of state discipline (McLain 2000), has been used to challenge public forest management, create solidarity between actors and influence management deliberations

(Brown and Marin-Hernandez 2000; McLain and Jones 2001). Avoiding a strict place-based approach for labelling gatherers (in part owing to their mobility, see McLain and Jones 1997), classification systems largely have been structured along the axes of gatherer economies and ethnicities (Jones and Lynch 2002; Carroll *et al.* 2003). In sum, US NTFP literature, like all scholarship, is a reflection of the conditions under which it was produced: in this case, political struggles in the management of public forestlands in the Pacific Northwest in the late 1980s and early 1990s. In the process, the literature usefully focused on commercial NTFP *economies* and autonomous NTFP *communities*.

The predominance of a literature grounded in the forestry crisis has left both theory and policy imprinted by this very particular moment (Love and Jones 2001). In focusing on commercial NTFP 'movements' in the Pacific Northwest, whole other ecologies and cultures may be overlooked. From both a theoretical and policy standpoint there is a need to widen the conceptual scope for understanding how people use forests. What proportion of the larger population draws upon materials from woodlands? Who are they and do they differ from the general population in their places of residence, ethnicities or income? And what is NTFP gathering like in places far from federal forests?

Method

For purposes of this study, we define the population of interest to be all residents of Maine, Massachusetts, New Hampshire and Vermont, a region that includes the Concord, Massachusetts home of Henry David Thoreau – that paramount and emblematic transcendental philosopher credited with some of the earliest articulations of American environmentalist ideals (Merchant 1989). To investigate gathering in this broader population, the authors surveyed New England residents in December 2004. This region was selected specifically because it is home to dense urban populations and has a minimum of public lands. The sample was intended to represent a profile of New Englanders generally, rather than forest user groups specifically.

The technique selected was a random-digit dial telephone survey. This assures access to those with unlisted telephone numbers and allows full spatial randomness. The survey was conducted by the Scripps Survey Research Center at Ohio University, using standard techniques for scientific and political

polling (Hauck and Cox 1974). Non-responses and partially completed surveys were not counted and were eliminated from subsequent analyses.

Surveys were administered by telephone interviewers using a fixed script. The questions and range of responses covered probable forest materials and uses in New England discovered through previous ethnographic research (Emery *et al.* 2003). The survey instrument was pre-tested to determine the comprehensibility of questions and revised to make its language more precise.

The survey began with a recruitment script describing the purposes of the study as being to determine people's use and enjoyment of forested lands in New England. Following recruitment, survey participants were asked whether they had gathered anything from forested areas during the previous five years. Those answering affirmatively were also asked whether they had done so during the past 12 months. Information was then collected from respondents regarding *how often* materials were gathered, the *type* of item gathered and the *use* of item(s) gathered. The concentration on questions regarding materials, frequency of gathering and usage, rather than *amounts* of materials, is based on the investigators' previous experience and studies suggesting limited ability of respondents to accurately estimate quantities, in contrast to more reliable recall of types of materials and frequency of activities. Table 1 provides the possible responses for *type* and *use* of nontimber forest products. This was followed by a demographic query for all survey participants, whether they gather materials or not. All surveys were conducted in English.

We define gatherers as those responding affirmatively to the question 'during the last five years, have you collected any tree or plant materials around woodlands; for example, mushrooms, berries, cones, or moss?' Our previous ethnographic experience with New Englanders from both urban and rural areas suggests that the terms used here (e.g. woodlands) are widely understood, though some variability in interpretation is inevitable. Our interpretation of affirmative respondents as 'gatherers' refers specifically to the behaviour (or practice, as per below) in a material sense, rather than self-identification as a type of person (Emery *et al.* 2003).

The survey had a total *n* of 1650 participants who completed full surveys. The demographics of that survey population were compared to the census demographics of the New England states in question to determine the degree to which the total respondent

Table 1 Survey choices for type and uses of NTFP item gathered

Types of items	Examples provided by surveyor	Uses of items
Edibles	Berries, Fiddleheads, Maple Sap	Personal and family use
Medicinal and dietary supplements	Ginseng, St John's Wort, Willow Bark	Gifts or trade
Decorative floral or craft products	Boughs, Birch Bark	Used it to make something to sell
Cultural or religious products	Sweetgrass, Woodland Sage, Sauna	Sold it as is
'Other' or 'no choice'	Switches	'Other' or 'no choice'

Note: Positive respondents were allowed to provide more than one response for both 'type' of item collected and 'uses of items'

Table 2 Summary of respondents and general population^a

	General population (NH, VT, ME, MA)	All respondents in survey
<i>Sex</i>		
Male	48.4%	39.2%
Female	51.6%	60.8%
<i>Education^b</i>		
Elem/High School	43.9%	30.2%
College	43.9%	40.0%
Graduate School	12.2%	16.1%
Refuse	n/a	13.7%
<i>Race^c</i>		
Non-white	11.5%	7.3%
White/Caucasian	88.5%	89.5%
Other	n/a	3.2%
<i>Total n</i>	9 468 633	1 650

^a Survey data regarding income was collected using ordinal categories (such as \$25 000 to \$40 000), which cannot be compared with 2000 census data for income (which is provided as an actual median value, such as \$44 516). Furthermore, there is no comparable census characteristic for the 'city size' variable which was collected in this survey. Age was not compared because survey respondents must be old enough to answer the phone and participate in the survey, while census data provides age information for the entire population

^b Education data for NH, VT, ME, MA was calculated based on 2000 census variables for educational attainment in the population 25 years and older. Categories were aggregated so that individuals that completed some high school up to high school graduation are included in the 'Elem/High School' category, while all individuals that have at least some college, an associates degree, or Bachelor's degree are included in the category 'College'

^c 'Non-white' survey responses consist of: Alaskan, Native American, Asian, Black, Hispanic, Pacific Islander

population was a reliable sample of the New England population. Table 2 provides the demographic characteristics for the 1650 survey participants in comparison to 2000 census data for the entire population of Maine, Massachusetts, New Hampshire and Vermont. The results suggest that the total survey population is a good, though not perfect, sample of the larger population; participants in our

survey were more likely to be female and tend to have higher education levels than the population of the survey area.

The key limitations of the survey technique are rooted in the structured biases of non-respondents. Given the screening question, non-respondents are less likely to be forest visitors. Thus, the results may be slightly biased towards *over-counting* gatherers.

Conversely, because non-English speakers have elsewhere been shown to be more likely to gather, the results may be slightly biased towards *under-counting* gatherers. Further limitations include an inability to perfectly distinguish forest gatherers who collect large quantities of materials versus those who collect small quantities. Thus, a positive response could include practices from picking and eating a single handful of berries to the harvest of buckets of berries over a single collection event.

Who gathers?

The results of the survey begin to dispute the characterisation of gatherers as part of a culturally and economically unique community by showing that the incidence of participation in NTFP harvesting is by no means uncommon. Furthermore, the demographic characteristics of NTFP gatherers in the northeastern United States are broadly similar to those of the general population in New England.

Rates of participation in gathering

Of the 1650 total survey respondents, 434 respondents provided a positive response to the question, 'during the last five years, have you collected any tree or plant materials around woodlands; for example, mushrooms, berries, cones, or moss?' Our study reveals, therefore, that more than one-quarter (26.3%) of the population in Maine, Massachusetts, New Hampshire and Vermont can be considered gatherers. Further, nearly one-fifth (17.9%) of people had gathered NTFPs during the previous 12 months. Thus, we can segment our positive respondents into two mutually exclusive groups as *occasional gatherers*, or those people who answered 'yes' to gathering in the past 5 years, but 'no' to collecting in the past 12 months, and *recent gatherers*, those that answered 'yes' to harvesting in the past 5 years and 'yes' to gathering in the past 12 months. From these data, we can imply that of the 26.3 per cent of the population that gathers, a majority (17.9% of the overall population) perhaps harvest NTFPs regularly, while a smaller portion (8.5%) gather NTFPs less frequently (Table 3).

This level of participation contrasts with that of many commonly recognised land-based outdoor activities. Table 4 shows results from the National Survey on Recreation and the Environment (Cordell *et al.* 2004) relative to our survey results. Gathering is more common than most sports and, more tellingly, more common than traditionally-defined 'wilderness'

Table 3 Per cent of general population that harvests NTFPs

	During the past 5 years	During the past 12 months
Have gathered	26.3	17.8
Have not gathered	73.7	83.1

Note: By nature of the survey questions, people that have collected in the past 12 months are a subset of the group which has collected in the past five years

Table 4 Rate of participation in outdoor activities in last 12 months as percentage of population

Activity	Rate ^a
NTFP collection	17.8
Golfing	16.7
Primitive camping	16.0
Basketball outdoors	14.0
Hunting	11.4
Tennis outdoors	10.5
Volleyball outdoors	10.4
Backpacking	10.3
Softball	10.0
Horseback riding	9.6
Football	8.1
Soccer outdoors	7.5
Baseball	6.4
Mountain climbing	6.3
Rock climbing	4.3
Caving	4.2

^a NTFP collection as percentage of New England population, based on survey described above. All others as percentage of national population, based on National Survey on Recreation and the Environment, average for years 1999–2002 (Cordell *et al.* 2004)

activities, including rock and mountain climbing, backpacking and caving. In keeping with the main argument of this paper, we hasten to add that in making this comparison we do not mean to classify gathering as a strictly recreational activity or to suggest it is ubiquitous, but the results do suggest an activity more common than many other outdoor practices.

Demographic characteristics of gatherers

Demographic information from our survey shows that gatherers are by no means a homogenous group

Table 5 Demographic characteristics of the general population, survey population and NTFP gatherers

	Census data (MA, ME, NH, VT)	All respondents in survey	Have collected in the past 5 years
<i>Education^a</i>			
Elem/High School	43.9%	35.0%	26.0%
College	43.9%	46.3%	48.0%
Graduate School	12.2%	18.7%	26.0%
<i>Race</i>			
Non-white	11.5%	7.3%	4.2%
White/Caucasian	88.5%	89.5%	94.0%
Other	n/a	3.2%	1.8%
<i>Income^b</i>			
	\$47 949**		
Less than \$25 000		20.2%	14.1%
\$25 000 to \$60 000		39.0%	41.6%
More than \$60 000		40.7%	44.3%
<i>City size</i>			
City		67.8%	55.6%
Rural area		32.2%	44.4%

Notes: Age and sex are not compared because we have identified a skew toward women and older populations in the methods section

^a Education and income percentages were calculated excluding those respondents who answered 'refuse'

^b Median income levels for MA, ME, NH and VT, respectively, are: \$50 502, \$37 240, \$49 467, \$40 856. Average median HH income (weighted by state population) is \$47 949

(Table 5), although a comparison with 2000 census data for the four states in our sample area shows that survey respondents (gatherers and non-gatherers alike) are not a perfect reflection of the general population. Respondents have higher levels of educational attainment than those in the region as a whole and NTFP gatherers appear to be still better educated. Twenty-six per cent of NTFP gatherers have attended graduate school, compared to only 12.2 per cent of the general population of Maine, Massachusetts, New Hampshire and Vermont and 18.7 per cent of the total survey population. In addition, amongst those who responded to the question about income, gatherers reported higher values, with the greatest difference in those earning less than \$25 000 per year (20.2% for all respondents and 14.1% for gatherers). More people who gather NTFPs identify themselves as White/Caucasian than the general population of New England or the entire survey population (94.0% of gatherers are White/Caucasian, while 88.5% of the general population of Massachusetts, Maine, New Hampshire and Vermont and 89.5% of the entire survey population are White/Caucasian). The total

of 'non-white' and 'other' in our sample is nearly comparable, however, to the non-white census figure, suggesting this is neither a disproportionately white or minority practice. However, given the high number of respondents who declined to provide information on their education and race, the sample must be considered conservative in its estimation of participation by less formally educated and non-white populations. A higher proportion of NTFP gatherers are rural residents as compared to the entire survey population, but a majority of NTFP gatherers are urbanites (55.6%).

These results show that, notwithstanding some divergence from the general population, NTFP gatherers come from diverse backgrounds, including wealthier and poorer populations, white and non-white populations, a variety of education levels, and both rural and urban areas. This broad participation in the practice of NTFP gathering is distinct from many other uses of nature, which tend to be dominantly the province of more affluent white males (Interagency National Survey Consortium 2002). Indeed, socioeconomic characteristics are poor predictors of those who collect materials from

Table 6 Type and use of NTFP item gathered

Type of item gathered	Edibles 61.5%	Decorative floral or craft products 58.8%	Cultural/religious needs 16.4%	Medicinal/dietary supplements 7.8%	Other/no choice 12.9%
Use of NTFPs gathered	Personal and family use 88.0%	Gifts or trade 5.3%	To make something I sold 2.1%	Sold it the ways it was when picked 1.2%	Other/don't remember 3.5%

Note: Respondents could provide more than one answer to the question, meaning that percentages of NTFP collectors that collect each type of item add up to over 100%

woodlands and those who do not. This is not a distinct demographic group, but is typical in many regards, crossing class, gender and race lines.

What do we gather?

In addition to examining exactly who gathers NTFPs, we are also interested in identifying what types of NTFPs are being gathered and how people use them. Based on previous research, we employed a four category classification for the survey: edible, medicinal/dietary supplement, decorative/craft and cultural/religious. We found that the majority of NTFP gatherers harvest edible items (61.5%) and decorative/floral items (58.8%). Table 6 shows, however, that all categories of NTFPs are gathered with some frequency and that no one type of product is particularly unusual to harvest. Furthermore, the results show that NTFP gatherers are overwhelmingly harvesting items for their own use (88%), and only occasionally use the items for gifts, trade or to sell. Only a tiny fraction of harvested materials enter the formal economy.

The use of NTFP items provided in Table 6 indicates that NTFP gathering in New England is primarily a nonmarket activity. The items that NTFP gatherers harvest possess value that rarely is realised on the market, and the gatherer's relationship with nature is not necessarily mediated through the buying and selling of natural products. Instead, people in New England enter their surroundings to directly interact with and utilise found materials without mediation by the capitalist economy or its informal alternatives.

Discussion: a practice and not a type of people

In sum, people from a range of socio-economic backgrounds are entering environments around them to gather products for their own purposes,

directly using and consuming plants. These gatherers operate well off the path of the formal economy, indeed even the 'alternative' economy of farmers' markets and craft fairs. In the absence of significant federal lands in the New England region, moreover, this body of gatherers is harvesting from private lands, roadsides, city parks and other areas. Our findings hold with those reported in other contexts (Emery *et al.* 2006b) and we suspect that they are indicative of general rates of gathering in the postindustrial world. Simply put, wild plants are normal parts of many people's lives.

Why has this set of practices largely been ignored in the critical literature on the topic? In part, of course, the problem is methodological. Previous research has sought out *case studies* of conflict and investigation into the character of alternative 'networks' and 'economies'. This focus necessarily excludes surveys of the diffuse population of casual harvesters.

Such research has been a politically useful and analytically necessary step since most such work has sought to help validate NTFP harvesting (Duchesne and Wetzel 2002). Investigation of that end of the problem also helps to explore more general questions about the nature of federal land management and the phenomenon of agency capture in the face of industrial power. Such important work necessarily depends on the classic tropes typically used to narrate the North American economy, however: private 'economies' and local 'communities' versus state and industrial power.

As a result, gathering by the broader population is largely overlooked, especially where it is non-commercial and carried out in places with lower federal presence. The implications of this silence are threefold.

First, the relationship of contemporary consumers with nature is somewhat different than the 'alienated' consumer picture offered in critical analysis. Such literature tends to associate contemporary 'environmental'

activities as, in the words of Neil Smith (1996, 42–3), ‘steeped in bourgeois modernism’ which replicates ‘the uncritical and unreflected treatment of nature as social sanitarium, space of recuperation, Thoreauvian anti-social retreat’. These romances, critics suggest, further mask the way subjects in capitalism are actually forced to reconsume alienated nature through commodities marketed back to them by corporations and commercial outlets (following Price 1995). While this view of consumption activities is by no means uncontested, critical approaches to ‘daily’ environmental behaviours continue to focus on market-mediated environmental experience (Bryant and Goodman 2004).

Yet here we observe interactions with wild plants, put to a range of uses, all outside the market, and none mediated by other formal economic actors. Almost all of these uses, it can be argued further, are intimate ones, whether the harvesting of aesthetic items or the harvesting of things for personal dietary, religious or medicinal needs. People are surreptitiously and personally involved in something very different from capitalist nature. For many, nature ‘out there’ seems connected to daily practice ‘in here’ in a relatively unproblematic way.

Secondly, this suggests that the gathering of NTFPs is not carried out by a ‘type of people’ by any means. While it is certainly true that important gatherer groups exist, the vast majority of gatherers are likely disassociated individuals coming from a wide range of socio-economic circumstances. Harvesting might therefore be better looked upon as a type of practice.

Simply because this practice is part of many people’s daily lives, however, does not mean that harvesting is politically neutral. As Michel de Certeau (1988, 37) has observed, such practices constitute *tactics*, actions within, and not on the fringes of, the larger society and polity, which actively remake people’s experiences in the face of hegemonic efforts to control, partition and define such behaviours and experiences.

Such tactics are spatially and categorically diffuse. They muddy the distinctions between the taken-for-granted divisions of public and private, nature and society, which commonly dominate and define modern life. This is in contrast to the officially sanctioned spatial partitions of the modern world: ‘a break between a place appropriated as one’s own and its other’ (de Certeau 1988, 36). Where powerful agents have attempted to rationalise and delimit natural and social spaces (e.g. forests versus cities),

the casual daily use of wild plants subverts any such clean partitions. This is especially true if we consider the potentially vast sources of these NTFPs in backyards, parks, state forests, private lands, fallow fields, etc. Wild and domestic spaces are crossed along with a potentially large number of property configurations.

In this sense, not only has the carving of the world into modern categories been a strategic approach of capital and the state, it may have been reinforced ironically, if inadvertently, by the very critical literature that espouses an alternative. For while NTFP advocacy does indeed do progressive political work by rallying producer communities and legitimising access to environmental goods and services, it has re-inscribed these spatially strategic binaries, precisely by advocating ‘alternative’ extractive economies. That is, critical work has depended heavily upon the notion not only that extractive timber-based forestry represents an environmental logic of capital, but that NTFP harvesting is a coherent, community-based, resisting, ‘alternative’ economy.

As Gibson-Graham has argued, however, this insistence that local discourses, behaviours and practices that don’t ‘fit’ must always be imagined relative to capital actually reinforces the power of hegemonic actors. The goal of political economy, therefore, is to subvert this tendency and ‘explain how global capitalism . . . gives rise to heterogeneity and diversity’ (Gibson-Graham 1996, 43). Attention to the harvesting ‘community’ and its ‘economy’, in this case, has hidden the somewhat common and equally complex practice of gathering by average people. It has also narrowly constrained the more organised harvester population by characterising it as an ‘economy’, but always one situated ‘as ultimately the same as, a complement to, the opposite of, or contained within capitalism’ (Community Economies Project 2005).

Such a formulation is distracting, since assimilation of daily life is always incomplete, despite the strategies that profess the ubiquity of capitalist experience. As de Certeau *et al.* (1998, 251) notes, popular practices of ordinary life, like informal harvesting, are characterised by their word-of-mouth ‘orality’, their ‘operational’ quality for practitioners, and their ‘ordinary’, as opposed to mass, culture. Flying beneath the radar, these elude simple incorporation and become the practices through which people interpret and negotiate the world.

This raises as many empirical and theoretical questions, however, as it resolves. Simply because

materials are harvested by both highly educated and less educated people, by the wealthy and the poor, does not mean that the marginal utility of those goods is equal to all. To whom are which species important and why?

So too, simply because gathering is occurring outside of federal lands, we continue to know little about the specific spatial pattern of harvesting and its distribution across differing forms of property and environmental contexts. What lands are these and what are the economic and ecological statuses of these areas?

Our results also raise questions for federal forest managers who are tasked by statute (P.L. 106–113, §339(a))¹ to parse out commercial from personal harvesting so that they can collect fees for the former while providing for the latter. Almost certainly, a sizable proportion of people who visit federally managed woodlands gather some plant material or fungi and the vast majority of them are *not* engaged in any sort of commercial activity. Further, commercial and noncommercial activities co-occur in space, time and, sometimes, in the person of a single gatherer. Can policies designed to manage large-scale commodity extraction be applied to these diverse practices? At what scale of harvesting is it desirable, or even possible, to require gatherers and gathering to conform to the logic of formal economics? Many federal lands provide space where intimate connections between people and nature are broadly available. Is it important that federal lands continue to provide such spaces? If so, what policies support that goal?

Even with these many unanswered questions, this survey provides a glimpse of the people who draw wild products from the woods – they are a lot like the rest of us. Furthermore, they are participating in interactions with non-human nature that are not determined solely by their role in a capitalist economy, and which do not simply represent the reconsumption of alienated nature by a class-specific subject. Turning Smith's critique of bourgeois environmentalism on its head then, the retreat into Thoreau's woods, evidenced in woodland harvesting, here in Thoreau's own backyard, even amongst a large middle-class, is not apparently capitalised or marketised in any way. These practices may constitute the tip of an iceberg, much as Gibson-Graham (2006) has suggested for the other economies of daily life. As people weave a world of human/non-human practices as part of their daily lives, they subvert the partitions of the world mapped by powerful actors,

including corporations. Every acorn harvested for the mantle is one not purchased at the mall.

None of this is to argue that communities of market-oriented harvesters, operating in more formal networks and economies, should not be the subject of research and advocacy attention, nor that the hegemonic power of traditional extractive industries does not represent a critical challenge for reform. Nor is this to argue that economic interaction with the environment undertaken by such groups is in and of itself 'alienating'. As Richard White has argued compellingly, the tendency to disparage nature as it is experienced through labour is regrettably typical of some environmentalism (White 1996). Rather, we have suggested that the assumption that non-producers, those broad sections of the population who do not work for a living in forests, are not necessarily relegated to a passive role of simply consuming nature at the mall, as has been asserted elsewhere. The pressing research task is to explore the uncatalogued engagements of diverse populations, who are constantly re-imagining and remaking the socio-environments around them, in the face of very real hegemonic forces that might have them do otherwise.

Note

- 1 U.S. Laws, Statutes, etc.; Public Law 106-113, div. B, Sec. 1000(a)(3) [title III, Sec. 339]. Pilot Program of Charges and Fees for Harvest of Forest Botanical Products. Act. of Nov. 29, 1999. Page 113 Stat. 1535, 1501A-119-200; 16 U.S.C. 528.

References

- Alexander S J, Weigand J and Blatner K A 2002 Nontimber forest product commerce in Jones E T, McLain R J and Weigand J eds *Nontimber forest products in the United States* University Press of Kansas, Lawrence KS 115–50
- Blatner K A and Alexander S 1998 Recent price trends for non-timber forest products in the Pacific Northwest *Forest Products Journal* 48 28–34
- Brown B A and Marin-Hernandez A 2000 *Voices from the forest: the lives and experiences of nontimber forest workers (voces de bosque adentro: vidas y experiencias de trabajadores forestales no-maderables)* The Jefferson Center for Education and Research, Wolf Creek OR
- Bryant R L and Goodman M K 2004 Consuming narratives: the political ecology of 'alternative' consumption *Transactions of the Institute of British Geographers* 29 344–66
- Butler B J, Leatherberry E C and Williams M S 2005 *Design, implementation, and analysis methods for the National Woodland Owner Survey* US Department of Agriculture,

- Forest Service, Northeastern Research Station, Newtown Square PA
- Carroll M S, Blatner K A and Cohn P J** 2003 Somewhere between: social embeddedness and the spectrum of wild edible huckleberry harvest and use *Rural Sociology* 68 319–42
- Chamberlain J L, Bush R J, Hammett A L and Araman P A** 2002 Eastern national forests: managing for nontimber products *Journal of Forestry* January/February 8–14
- Community Economies Project** 2005 *Community Economies* 30 May
- Cordell K H, Betz C J, Green G T, Mou S, Leeworthy V R, Wiley P C, Barry J J and Hellerstein D** 2004 *Outdoor recreation for 21st century America* Venture Publishing, State College PA
- Crook C and Clapp R A** 1998 Is market-oriented forest conservation a contradiction in terms? *Environmental Conservation* 25 131–45
- de Certeau M** 1988 *The practice of everyday life* University of California Press, Berkeley CA
- de Certeau M, Giard L and Mayol P** 1998 *The practice of everyday life volume 2: living and cooking* University of Minnesota Press, Minneapolis MN
- Dick R E** 1996 Subsistence economies: freedom from the marketplace *Society & Natural Resources* 9 19–29
- Duchesne L C and Wetzel S** 2002 Managing timber and non-timber forest product resources in Canada's forests: needs for integration and research *Forestry Chronicle* 78 837–42
- Dyke A** 2001 The Scottish Wild Mushroom Forum in **Nauta M M and Moore D** eds *Fungal conservation: issues and solutions* Cambridge University Press, Cambridge 219–22
- Dyke A J** 2006 The practice, politics and ecology of non timber forest products in Scotland Unpublished doctoral dissertation University of Glasgow, Glasgow
- Dyke A J and Newton A C** 1999 Commercial harvesting of wild mushrooms in Scottish forests: is it sustainable? *Scottish Forestry* 53 77–85
- Emery M R** 1998 Invisible livelihoods: non-timber forest products in Michigan's Upper Peninsula UMI Dissertation Services, Ann Arbor MI
- Emery M R** 1999 Social values of specialty forest products to rural communities in **Josiah S J** ed *Proceedings of the North American conference on enterprise development through agroforestry: farming the forest for specialty products* Center for Integrated Natural Resources and Agricultural Management (CINRAM), University of Minnesota, Minneapolis MN 25–32
- Emery M R** 2002 Space outside the market: implications of NTFP certification for subsistence use in **Shanley P, Pierce A, Laird S and Guillen A** eds *Tapping the green market: management and certification of NTFPs* Earthscan, London 302–12
- Emery M R, Ginger C, Newman S and Giammusso M R B** 2003 *Special forest products in context: gatherers and gathering in the eastern United States* USDA Forest Service, Northeastern Research Station, Newtown Square PA
- Emery M R, Pierce A R and Schroeder R** 2004 Criterion 6, Indicator 47: area and per cent of forest land used for subsistence purposes. Data report: a supplement to the National Report on Sustainable Forests – 2003, Analyses of the Indicators (<http://www.fs.fed.us/research/sustain/contents.htm>) Accessed 30 December 2004
- Emery M R, Ginger C and Chamberlain J** 2006a Migrants, markets, and management of natural resources in western North Carolina in **Furuseth O J and Smith H** eds *The new south: Latinos and the transformation of place* Ashgate, Burlington VT 69–87
- Emery M R, Martin S and Dyke A** 2006b *Wild harvests from Scottish woodlands: social, cultural and economic values of contemporary nontimber forest products* Forestry Commission, Edinburgh
- Forestry Commission** 2005 *GB public opinion of forestry 2005* Forestry Commission, Edinburgh
- Freed J** 2001 Non-timber forest products in local economies: the case of Mason County, Washington in **Emery M R and McLain R J** eds *Non-timber forest products: medicinal herbs, fungi, edible fruits and nuts, and other natural products from the forest* Food Products Press, Binghamton NY 67–9 (monograph published simultaneously as the *Journal of Sustainable Forestry* 13 3/4)
- Gibson-Graham J K** 1996 *The end of capitalism (as we knew it)* Blackwell, Cambridge
- Gibson-Graham J K** 2006 Progress in human geography lecture, presented at the *Association of American Geographers Annual Meeting* Chicago 7–11 March
- Hagen B V and Fight R D** 1999 *Opportunities for conservation-based development of nontimber forest products in the Pacific Northwest* US Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland OR
- Hagen B V, Weigand J F, McLain R, Fight R and Christensen H H** 1996 *Conservation and development of nontimber forest products in the Pacific Northwest: an annotated bibliography* US Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland OR
- Hansis R** 1996 The harvesting of special forest products by Latinos and Southeast Asians in the Pacific Northwest: preliminary observations *Society & Natural Resources* 9 611–15
- Hauck M and Cox M** 1974 Locating a sample by random digit dialing *Public Opinion Quarterly* 38 253–60
- Hecht S and Cockburn A** 1989 *The fate of the forest: developers, destroyers and defenders of the Amazon* Verso, London
- Hinrichs C C** 1998 Sideline and lifeline: the cultural economy of maple syrup production *Rural Sociology* 63 507–32
- Hirt P W** 1994 *A conspiracy of optimism: management of the national forests since World War Two* University of Nebraska Press, Lincoln NE
- Hislop M, Edwards D, Elliott A, Martin S, Morris J, O'Brien L, Serrand M and Valentin G** 2006 A valuation of the economic and social contribution of forestry for people in Scotland: draft interim report for Forestry Commission Scotland Forest Research, Roslin

- Interagency National Survey Consortium** 2002 *National Survey on Recreation and the Environment (NSRE): 2000–2002* USDA Forest Service and University of Tennessee Human Dimensions Research Laboratory, Athens GA and Knoxville TN
- Jahnige P** 1999 *Non-timber forest product uses and values in Baltimore, Maryland* Community Resources, Baltimore MD
- Jones E T and Lynch K** 2002 The relevance of sociocultural variables to nontimber forest product research, policy, and management in **Jones E T, McLain R J and Weigand J** eds *Nontimber forest products in the United States* University Press of Kansas, Lawrence KS 26–51
- Latour B** 2004 *Politics of nature: how to bring the sciences into democracy* Harvard University Press, Cambridge MA
- Liegel L, Pilz D and Love T** 1998 The biological, socioeconomic, and managerial aspects of chanterelle mushroom harvesting: the Olympic Peninsula, Washington State, USA *Ambio: A Journal of the Human Environment* Special Report 9 3–35
- Love T and Jones E** 2001 Why is non-timber forest product harvesting an 'issue'? Excluding local knowledge and the paradigm crisis of temperate forestry *Journal of Sustainable Forestry* 13 105–22
- Lynch K A and McLain R J** 2003 *Access, labor, and wild floral greens management in western Washington's Forests* US Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland OR
- McLain R J** 2000 Controlling the forest understory: wild mushroom politics in central Oregon Unpublished Doctoral dissertation University of Washington, Seattle WA
- McLain R J** 2002 Business as usual: the exclusion of mushroom pickers in wild mushroom management in Oregon's national forests in **Jones E T, McLain R J and Weigand J** eds *Nontimber forest products in the United States* University Press of Kansas, Lawrence KS 375–84
- McLain R J and Jones E T** 1997 *Challenging 'community' definitions in sustainable natural resource management* International Institute for Environment and Development, London
- McLain R J and Jones E P** 2001 Expanding non-timber forest product harvester/buyer participation in Pacific Northwest forest policy in **Emery M R and McLain R J** eds *Non-timber forest products: medicinal herbs, fungi, edible fruits and nuts, and other natural products from the forest* Food Products Press, Binghamton NY 147–61 (monograph published simultaneously as the *Journal of Sustainable Forestry* 13 3/4)
- Merchant C** 1989 *Ecological revolutions: nature, gender, and science in New England* University of North Carolina Press, Chapel Hill NC
- Milliken W and Bridgewater S** 2001 *Flora celtica: sustainable development of Scottish plants* Scottish Executive Central Research Unit, Edinburgh
- Milliken W and Bridgewater S** 2004 *Flora celtica* Brinn, Edinburgh
- Molina R, O'Dell T, Luoma D, Amaranthus M, Castellano M and Russell K** 1993 *Biology, ecology, and social aspects of wild edible mushrooms in the forests of the Pacific Northwest: a preface to managing commercial harvest* Pacific Northwest Research Station, Portland OR
- Palmer J F** 1998 *Clearcutting in the White Mountains: perceptions of citizens, opinion leaders and US Forest Service employees* State University of New York, Syracuse NY
- Palmer J F** 2000 *Recreational use of wetlands in Juneau, Alaska* USDA Forest Service, Northeastern Research Station, Newtown Square PA
- Price J** 1995 Looking for nature at the mall: a field guide to the nature company in **Cronon W** ed *Uncommon ground: rethinking the human place in nature* W. W. Norton, New York 186–203
- Richards R T** 1997 What the natives know: wild mushrooms and forest health *Journal of Forestry* 95 5–10
- Richards R T and Creasy M** 1996 Ethnic diversity, resource values, and ecosystem management: Matsutake mushroom harvesting in the Klamath bioregion *Society and Natural Resources* 9 359–74
- Robbins P** 2001 Tracking invasive land covers in India or why our landscapes have never been modern *Annals of the Association of American Geographers* 91 637–59
- Robbins P** 2007 *Lawn people: how grasses, weeds, and chemicals make us who we are* Temple University Press, Philadelphia PA
- Robbins P and Sharp J** 2003 Producing and consuming chemicals: the moral economy of the American lawn *Economic Geography* 79 425–51
- Sanderson H and Prendergast H D V** 2002 *Commercial uses of wild and traditionally managed plants in England and Scotland* Centre for Economic Botany and Royal Botanic Gardens, Kew, London
- Schlosser W E and Blatner K A** 1995 The wild edible mushroom industry of Washington, Oregon and Idaho *Journal of Forestry* 93 31–6
- Smith N** 1996 The production of nature in **Robertson G, Mash M, Tickner L, Bird J, Curtis B and Putnam T** eds *FutureNatural: nature/science/culture* Routledge, New York 35–54
- Smith W B, Vissage J S, Darr D R and Sheffield R M** 2001 *Forest resources of the United States, 1997* US Department of Agriculture, Forest Service, North Central Research Station, St Paul MN
- Svenning J C and Macia M J** 2002 Harvesting of *Geonoma macrostachys* Mart. leaves for thatch: an exploration of sustainability *Forest Ecology and Management* 167 251–62
- Thomas M G and Schumann D R** 1993 *Income opportunities in special forest products: self-help suggestions for rural entrepreneurs* no 666 USDA Forest Service, Washington DC
- Turner N J** 1998 *Plant technology of First Peoples of British Columbia* University of British Columbia Press, Vancouver
- Vance N C** 1995 Medicinal plants rediscovered *Journal of Forestry* 93 8–9

- Wang G A, Anderson D H and Jakes P J** 1996 Legislating the past: cultural resource management in the US Forest Service *Society & Natural Resources* 9 3–18
- Wetzel S, Duchesne L C and Laporte M F** 2006 *Bioproducts from Canada's forests: new partnerships in the bioeconomy* Springer, Dordrecht
- White R** 1996 *The organic machine: the remaking of the Columbia River* Farrar, Straus and Giroux, New York
- Wong J and Dickinson B** 2003 *Current status and development potential of woodland and hedgerow products in Wales* Wild Resources Limited, Bangor for Countryside Council for Wales, Forestry Commission (Wales) and Welsh Development Agency, Bangor