

2014

# The Distance from Necessity: A Bourdieusian Analysis of Gathering Practices in Vermont

Alan Robert Pierce

*Antioch University - New England*

Follow this and additional works at: <http://aura.antioch.edu/etds>



Part of the [Other Forestry and Forest Sciences Commons](#), and the [Place and Environment Commons](#)

---

## Recommended Citation

Pierce, Alan Robert, "The Distance from Necessity: A Bourdieusian Analysis of Gathering Practices in Vermont" (2014). *Dissertations & Theses*. 73.

<http://aura.antioch.edu/etds/73>

This Dissertation is brought to you for free and open access by the Student & Alumni Scholarship, including Dissertations & Theses at AURA - Antioch University Repository and Archive. It has been accepted for inclusion in Dissertations & Theses by an authorized administrator of AURA - Antioch University Repository and Archive. For more information, please contact [dpenrose@antioch.edu](mailto:dpenrose@antioch.edu), [wmcgrath@antioch.edu](mailto:wmcgrath@antioch.edu).



Department of Environmental Studies  
DISSERTATION COMMITTEE PAGE

The undersigned have examined the dissertation entitled:

**THE DISTANCE FROM NECESSITY:**

**A BOURDIEUSIAN ANALYSIS OF GATHERING PRACTICES IN VERMONT**

presented by Alan Robert Pierce, candidate for the degree of Doctor of Philosophy,

and hereby certify that it is accepted.\*

Alesia Maltz, Ph.D. (Core Faculty, Antioch University New England)

James Jordan, Ph.D. (Core Faculty, Antioch University New England)

Marla Emery, Ph.D. (Research Geographer, United States Forest Service and University of Vermont)

Defense Date: December 7, 2013

Date Approved by all committee members: December 7, 2013

Date Submitted to the Registrar's Office: January 14, 2014

\*Signatures are on file with the Registrar's Office at Antioch University New England

**THE DISTANCE FROM NECESSITY:  
A BOURDIEUSIAN ANALYSIS OF GATHERING PRACTICES IN VERMONT**

By

Alan Robert Pierce

A dissertation submitted in partial fulfillment of  
the requirements for the degree of

Doctor of Philosophy  
Environmental Studies

at

Antioch University New England

2014

© Copyright by Alan R. Pierce 2014

All Rights Reserved

## Acknowledgements

I thank my committee members for their steadfast support and encouragement. I am particularly grateful to my advisor, Alesia Maltz, for her kindness, patience, and fierce insistence that I finish my dissertation and not let my research fall through the cracks. I thank Marla Emery for our past collaborations, her suggestion to use Bourdieu as a theorist, and her willingness to act as a sounding board for my ideas over the years. I thank Jim Jordan for his probing questions, careful reading of my text, and thoughtful comments.

To Trish Shanley, thank you for championing my earlier work and taking the time to provide such insightful comments on my latest project. I thank Emily Stanley for sharing recipes, wild edibles, and journal articles, and for her incisive comments on my draft chapters. Eric Jones provided very helpful feedback on my results section, as well as some much-appreciated dried morels, porcinis, and candy caps. To my interviewees, I extend my heartfelt appreciation for inviting me into your homes and graciously sharing your knowledge and time with me.

I am most grateful to Jamison Ervin for her unwavering support, her deep reserves of patience, her perspicacious comments on my work, and her computer wizardry. I would not have finished this work without you. And to Lincoln, thank you for putting up with a distracted father for so many years.

*The Distance from necessity:  
A Bourdieusian analysis of gathering practices in Vermont*

**Abstract**

This study examines why contemporary Americans continue to gather wild plants and fungi. Vermont, a state with a rich history of gathering, serves as a study site. I interviewed twenty-four gatherers using ethnographic methods. I applied a Bourdieusian framework to analyze the differences between gathering practices as they related to gathering knowledge, views of nature, and uses of gathered products. The interviews indicated that gathering is important to the physical and mental well-being of its practitioners and instills a connection to nature as well as to place. Interviewees cited spending time in nature and enjoyment of engaging the senses as the primary reasons for gathering. Other reasons identified included strengthening social bonds, obtaining food, medicine or income, and enjoying the “treasure hunt” aspect of gathering. Differences in gathering practices are attributable to habitus and background. Interviewees from agrarian backgrounds primarily learned their gathering skills from friends or relatives, rarely used scientific names of plants or fungi, often equated gathering with work, and tended to view gathered products as economic capital. By contrast, interviewees from suburban and urban backgrounds mostly learned their gathering skills through classes or books, exhibited greater familiarity with scientific names of species, saw gathering as a leisure activity, and were more apt to use gathered products as social and symbolic capital. Vermont is transitioning from an agrarian-based economy to a mixed-economy, and in the process, the working landscape is being replaced by a landscape of leisure. Gathering as an agrarian practice is being supplanted by gathering as an epicurean-oriented practice, and heralds a subtle shift in human-nature interactions. Policy makers need to account for such shifts and demonstrate greater nuance in regulating gathering, particularly non-commercial gathering. My research also suggests that trends to professionalize gathering are on the rise, a finding that could result in the exclusion of gatherers from resources or markets.

Keywords: Gathering, non-timber forest products (NTFPs), Bourdieu, practice, capital, Vermont

## Contents

Acknowledgements.....	i
Abstract.....	ii
List of Tables .....	vi
List of Figures.....	vi
Prologue: A wintry Saturday morning in Vermont.....	1
Chapter 1: Introduction.....	4
Background.....	4
Research questions.....	9
Why Vermont?.....	12
Relevance.....	15
Chapter 2: Gathering in the modern world – A literature review .....	18
Introduction.....	18
Early years of the non-timber forest product literature.....	19
Scope of the non-timber forest product literature .....	20
Methods and analyses used by NTFP scholar.....	25
Frameworks to describe the persistence of NTFP gathering in developed countries .....	27
The diverse economies literature .....	28
Frameworks to explain non-economic dimensions of gathering .....	30
Bourdieu and Foucault.....	34
Summary.....	38
Chapter 3: Methods.....	40
Introduction.....	40
Sampling.....	41
Field methods.....	43
Field Notes.....	46
Data analysis.....	46
Authenticity and ethical concerns.....	49
Study limitations.....	50
Chapter 4: A brief history of human-plant interactions in Vermont, 1600 – present .....	51
Introduction.....	51
Setting.....	52

Abenaki land management and plant use, pre-European contact.....	52
Contemporary Abenaki plant use.....	55
Europeans and the transformation of the land.....	56
Euro-American settler plant use, 1700s-1800s .....	59
Vermont in transition, mid-1800s to present day.....	65
Use of wild plants in Vermont, early 1900s to present .....	69
Changes in the Vermont economy .....	77
Changes in Vermont demography.....	79
Socio-political impacts of demographic shifts in Vermont.....	80
Two Vermonts?.....	82
Summary .....	84
Chapter 5: Results – An Introduction to some of the gatherers .....	86
Select gatherer profiles.....	86
Summary .....	99
Chapter 6: Results – Reasons why Vermonters gather wild foods and medicines .....	100
Introduction.....	100
Gathering as a way of spending time in nature .....	101
Gathering as a sensory experience .....	104
Gathering as a social activity .....	108
Gathering as self provisioning .....	111
Gathering for health .....	111
Gathering for income .....	114
Gathering as passion .....	118
Gathering as a treasure hunt.....	119
Gathering as a temporal and spatial anchor .....	120
Gathering as a learning activity .....	121
Gathering as a transformational activity .....	124
Gathering as a means of maintaining identity.....	128
Factors contributing to the maintenance or decline of gathering practices in Vermont.....	129
Summary .....	135
Chapter 7: A Bourdieusian analysis of gathering practices in Vermont.....	136
Introduction.....	136
Bourdieu: An overview.....	136



Rurals and Neos .....	141
Differences in views of nature .....	148
Differences in gathering knowledge .....	153
Gathered products as capital .....	158
Gathering as work versus gathering as leisure .....	164
Symbolic violence.....	167
Summary .....	169
Chapter 8: Conclusion.....	172
The transformation of the gathering field .....	172
Newly contested spaces within the Vermont gathering field.....	173
The intersection of the gathering and regulatory fields .....	178
Research summary .....	180
Areas for further research .....	184
Concluding thoughts .....	188
Literature cited .....	190
Appendix A: Interview Guide for Vermont Gatherers .....	217
Appendix B: Participant release agreement .....	219

## List of Tables

<b>Table 1:</b> <u>Wild plants and trees historically used by the Abenaki in Vermont</u> .....	54
<b>Table 2:</b> <u>Reasons cited for gathering</u> .....	101
<b>Table 3:</b> <u>Characteristics of rural-raised gatherers</u> .....	146
<b>Table 4:</b> <u>Characteristics of Neo gatherers</u> .....	147

## List of Figures

<b>Figure 1:</b> <u>Tombstone for Rainforest Crunch, Ben and Jerry's Ice Cream Factory</u> .....	5
<b>Figure 2:</b> <u>Decline in acres of farmland and number of farms in Vermont, 1880- 2007..</u>	68
<b>Figure 3:</b> <u>Vermonters with 4 or more years of college, 1940-2007</u> .....	81
<b>Figure 4:</b> <u>Sign forbidding berry harvest on private property</u> .....	174
<b>Figure 5:</b> <u>Sign banning commercial fiddlehead gathering</u> .....	174

## **Prologue: A wintry Saturday morning in Vermont**

It is a Saturday morning at Bethel High School in central Vermont and the gymnasium is in use. But the usual cries of youths engaged in athletics and the odors of teen perspiration are absent. Instead, the air of the room is heavy with a feral fug suggesting an abattoir. The distinctly musky overtone of beaver castor permeates the gym, blending with scents of blood, offal and gamey fur.

The pelts of many northeastern furbearing mammals lie in long rows upon brown paper spread across the basketball court, paper that exhibits grease spots from the furs by morning's end. Muskrat, otter, beaver pelts stretched tight like drum covers, rabbit, coyote skins that seem to stare through the hollow holes where their eyes once were, fisher, fox, and even a few skunk pelts lay tagged and bunched by lot. A full black bear skin, head still attached, sits piled in a heap on the floor. Next to the hide, in a large Ball jar, sits the creature's glistening gall bladder, destined for use as a medicinal in Asia.

The rapid-fire, staccato voice of an auctioneer barks through a tinny-sounding public address system, announcing each trapper's harvest and eliciting bids from seven seated buyers:

Next lot is a nice lot. Five mink here - three male, two female. Can we get a starting bid of fifty dollars? Do I hear fifty? Okay, fifty-five? Sixty? Sixty-five, seventy, seventy, seventy, seventy-five. Who'll give me eighty? Eighty, eighty-five? Eighty-five. Ninety. Ninety, ninety, ninety? Ninety-five! One hundred, do I hear one hundred? One hundred! One hundred five? One hundred five? Nice lot here... One hundred once, one hundred twice... Sold to buyer number three for one hundred dollars!

I note the selling prices of some of the other lots. Five coyotes for \$125. Ten fisher cats for \$825. One poorly skinned skunk fetches only two dollars. Twenty-seven muskrat for \$200; five raccoons for \$82; two possums for \$2; sixteen beaver for \$420; two short-tailed weasels for \$11; two otter for \$180; four pounds of beaver castor for \$55. One stunningly colored gray fox

pelt fetches \$32. Game wardens from Vermont's Department of Fish and Wildlife present two very large moose antler racks salvaged from roadkills and they sell for several hundred dollars apiece. The lone female trapper I observe receives \$175 dollars for five red fox pelts.

In the school's cafeteria, trappers, farmers, curious onlookers and state officials sip coffee and eat snacks. On several of the dining hall tables, more bounty from Vermont's wild lands is on display. Large clear plastic bags of dried, gnarled yellowish roots are arranged for discriminating inspection and eventual auction to two hardened buyers. The bags contain American ginseng (*Panax quinquefolius*) roots, harvested by an all-male crowd congregating in one corner of the room. The men seem to share a common wardrobe consisting of flannel shirts and work pants. Several wear caps emblazoned with farm machinery manufacturer logos. One wears suspenders. They are mostly older men, in their sixties, seventies, and eighties. Some have hands that are weathered and work-worn with gnarled fingers that oddly resemble the ginseng roots they harvest.

The auctioneer steps into the cafeteria at the close of the fur auction. He chats with the ginseng diggers, some of whom he knows well because they are also trappers. He looks over the roots for sale, picks up a piece of ginseng, and cracks a stale joke that plays on ginseng's reputation as an aphrodisiac. He starts the bidding at a low price, receives a positive nod of the head from one buyer and quickly turns to the other asking if he will pay ten dollars more. He goes back and forth between the two men, the price escalating, until one buyer shakes his head in the negative. The top lot of the day is a 1.58 pound bag of roots that sells for \$510 (\$322 per pound).

The event this early December weekend is the annual Vermont fur and ginseng auction. The auction draws an increasingly uncommon breed of rural Vermonters, often referred to as

Old-timers or Mountain Men, as they are, for the most part, males. I ask a ginseng digger how many roots it takes to yield a dried pound of ginseng. “About 130, maybe 150, depending on the age and size; soils make a difference too,” he replies. I think of the labor it takes to find the ginseng patches and carefully harvest the roots so as not to scuff them, which would lower their value. The biggest ginseng patch I know of cannot contain more than one hundred plants; most patches I’ve seen only host a dozen plants or fewer. The time involved in locating a single patch of ginseng is considerable - days, if not weeks, of work. I likewise wonder about the time and effort involved in trapping, skinning and drying an animal such as a possum whose pelt will only fetch a dollar.

## Chapter 1: Introduction

### Background

I first visited the Vermont fur and ginseng auction in the early 1990s. At the time, I was conducting research on ginseng as a potential woodland cash crop for Vermont landowners. A few years earlier, Peters, Gentry, & Mendelsohn (1989) had published a piece in *Nature* promoting non-timber forest products as a solution to tropical deforestation. Their argument was simple and compelling. They made the case that the value of a standing forest, in yields of fruits, exudates, medicinal plants and craft materials, far exceeded the revenues one would obtain from logging the forest. The strategy was hailed as a win-win conservation scenario and non-timber forest product enterprises burgeoned overnight, most memorably Rainforest Crunch.

I was a young forestry student enamored with the idea of transporting the non-timber forest product concept to the temperate zone as a conservation and rural economic development tool. The conservation impacts appeared obvious, or so I thought, and the economics, on paper, looked tempting enough to sway most land owners. But there was a catch. Non-timber forest product commercialization proved challenging to implement and often did not produce expected results. Within a few years of the publication of Peters et al.'s (1989) paper, the tactic of using non-timber forest products as a conservation and development tool came under scholarly siege.

The most cogent critique of non-timber forest products as a conservation and development tool came from Homma (1992). Using historical data from the Amazon, Homma posited that non-timber forest product trade followed a predictable trajectory of expansion, stagnation, and decline. According to Homma, the supply of non-timber forest products was inelastic (i.e., their production had natural limits that cannot be stretched to meet increased

demand). Therefore, commercial harvest of these resources results in one of the following fates: over-exploitation and a decline in the resource population; a shift from wild production to intensive cultivation; or product substitution. Homma's (1992) analysis offered a powerful commentary on the fragility of natural resource dependency in an age of mass consumption. A number of scholars raised additional issues concerning the commercialization of non-timber forest products, including insecure land tenure, the highly perishable nature of some of the products, difficulties in marketing products at both the local and international levels (Pendelton, 1992), inappropriate pricing estimations and failures to predict annual yields of products (Godoy, Lubowski, & Markandya, 1993), and general unfamiliarity with the market economy on the part of many local communities (Shanley, 1999).

Scholars concluded that non-timber forest product commercialization was possible in some cases, but generally required a number of pre-conditions, including reliable markets, a favorable law and policy environment, technical assistance, and a well-managed resource base (see Marshall, Schreckenberg, & Newton, 2006; Laird, McLain, & Wynberg, 2010). Like many conservation strategies, non-timber forest products had a funding shelf-life. Foundations and international aid agencies supported non-timber forest product projects in the 1990s, but support dwindled as new conservation priorities such as forest certification, REDD (reducing emissions from deforestation and



Figure 1: Tombstone for Rainforest Crunch, Ben and Jerry's Ice Cream Factory, Waterbury, VT.

forest degradation), desertification, and climate change emerged. As if to signal the decline of the concept, Ben and Jerry's in Waterbury, Vermont, officially retired their Rainforest Crunch brand of ice cream in the mid-1990s and erected a headstone to its memory in the "flavor cemetery" (photo 1) on the plant's grounds.

After I finished my work on woodland ginseng as a potential cash crop, I continued to work on forest policy issues impacting non-timber forest products. As I did so, I found myself moving further and further away from looking at gathered products through an economic lens. As my interest in the economic side of gathering waned, my curiosity about the human dimensions of gathering, specifically the lives of gatherers, grew. I began gathering on my own, starting with some of the "easy" plants, such as fiddlehead ferns and wild leeks. But the gatherers I met in the Burlington, Vermont area seemed very different from the ginseng gatherers I had met at the fur and ginseng auction. They were younger, and mostly "from away" - new transplants to the state. Some were quite well educated and considered themselves epicures.

Gathering had not yet become a popularized activity in Vermont in the 1990s. At the time, it was practiced much as it always had been in the rural areas of the state. Yet in the more heavily-settled areas such as Burlington, there was an aura of desperation and danger associated with gathering. It was not a mainstream practice. American wild edibles guru Euell Gibbons was well aware of gathering's reputation as an outsider's practice. In *Stalking the Good Life: My Love Affair with Nature*, Gibbons (1974) made his distaste of interviews known by pigeonholing the media's penchant for sensationalizing gatherers as "freaks":

One fall a reporter from New York called me and asked if he could do a story on me. I have learned to be cautious about such interviews, since many interviewers want to portray me as some kind of weed-eating freak, like the man in the carnival sideshow who eats beer glasses and swallows razor blades. (p. 74)



Yet surveys in the early 2000s suggested that gathering was prevalent across the United States. In a national survey, Cordell et al. (2004) found that more than 64 million Americans over the age of 16 reported gathering mushrooms, berries or other natural products. A telephone survey of New England residents revealed similar results. Nearly 18% of respondents reported collecting mushrooms, berries, cones or moss in the previous year (Robbins, Emery, & Rice, 2008). While these two surveys likely conflated casual gatherers (those who pick the random blueberry or spring green) with dedicated gatherers (those who plan their lives around gathering and maintain an active relationship with the resource base), the findings nonetheless indicated that a sizeable number of Americans harvested wild floral and fungal resources.

I was faced with an enigma: gathering appeared to be an “underground” activity, yet surveys suggested that the practice was widespread. The surveys suggested that one out of every five Americans gathered. I knew a few gatherers, but I was not meeting dedicated gatherers at anywhere near this rate.

Fast forward to the late 2000s, and the situation in Vermont appeared to be dramatically different. Numerous restaurants featured locally gathered wild plants and mushrooms. During the summer months, newspapers regularly ran ads for classes on wild edible identification skills for beginners. A young couple in Burlington began offering for-pay forays on wild mushroom identification across Vermont. Registration for their events often filled to capacity weeks or even months in advance (see [themushroomforager.com](http://themushroomforager.com)). In Vermont, and indeed across much of the United States, gathering had seemingly become mainstream.

In the wake of the U.S. economic collapse in 2008, gathering was promoted as a useful survival skill for buffering difficult economic times. Even ESPN, America’s largest purveyor of sports entertainment, carried an article on its website advising readers on how to procure free

food from the wild including fish, eels, bracken fern, miner's lettuce and other wild edibles (Swan, 2009). Reuters featured a story about thrifty Americans returning to foraging as a money-saving strategy and quoted one Manhattanite as saying that the gathering skills he had learned were "strangely comforting" (Kebede, 2009). As a *New York Times* writer (Wallace, 2010) noted, gathering had become a chic response to the economic downturn:

As unlikely as it sounds, foraging is hot. A recession-friendly habit – what could be cheaper than picking weeds for your supper? – it is also a logical (if extreme) extension of the local-foods movement. Slow Food chapters across the country are touting foraging walks; companies such as the botanist John Kalla's Wild Food Adventures run sold-out edible-plant workshops and clam digs; and community gleaning organizations are popping up like mushrooms from coast to coast.

As the U.S. economy improved, gathering only gained in stature. In late 2010, Epicurious, the self-proclaimed website "for people who love to eat," selected foraging as a top ten food trend for the year 2011, predicting that over the ensuing year, foodies would "take trowel in hand for some wild crafting" (Steel, 2010). Articles on gathering also appeared in popular American news magazines such as *Time* (Stein, 2010) as well as in upscale niche publications like *Utne Reader* (Goetzman, 2010) and *The New Yorker* (Kramer, 2011).

The gathering trend was not confined to rural areas. Urban foraging became a fad and groups across the country created maps of city fruit trees and organized gleaning operations (Severson, 2009; Lorinc, 2011). Websites devoted to mapping urban fruits and establishing exchanges for the trade of wild gathered urban produce grew in popularity overnight, (e.g., see [urbanedibles.org](http://urbanedibles.org); [neighborhoodfruit.com](http://neighborhoodfruit.com); [fallenfruit.org](http://fallenfruit.org), and; [veggietrader.com](http://veggietrader.com), for a sampling). The *New York Times*' City Room blog featured articles on urban gathering by writer Ava Chin, while *Edible Manhattan*, a city-based magazine, began to run an "urban forager" column. Between 2011 and 2013, Boston's Gallery 263 hosted three annual fundraising events entitled

“A Wild City Table,” consisting of dishes created entirely from locally gathered wild edibles (Hysmith, 2013). Meanwhile, Seattle Washington announced plans to create a food forest - a public space filled with fruit trees and nut trees underlain with wild edible annuals and perennials - that will be available for harvest to all city dwellers (see [beaconfoodforest.weebly.com](http://beaconfoodforest.weebly.com)).

In 2010, *Restaurant*, a British-based magazine catering to food professionals the globe over, named Copenhagen’s Noma the number one restaurant in the world on its annual list of the planet’s top 50 eateries. The restaurant went on to win the top award again in 2011 and 2012. Helmed by celebrity forager-cum-chef René Redzepi, Noma featured a host of locally sourced wild edibles each night including rose-hips, beach dandelions, short beach grass, sea lettuce, sea goosefoot, bladder wrack, sorrel, powdered oak shoots, scurvy grass, beach horseradish, sea arrow grass, wild ramps, a host of wild mushrooms, and deep-fried reindeer moss (Kramer, 2011). The forty-four seat restaurant often had a waiting list of over a thousand people on weekends, and the world’s elite were known to charter private jets to Denmark just to sample Redzepi’s creations (Kramer, 2011). Noma’s runaway success only served to underscore that wild edibles were here to stay.

### **Research questions**

Foderaro (2011) described the new breed of gatherers as multivariate: “Foragers today are an eclectic bunch, including downtown hipsters, recent immigrants, vegans, and people who do not believe in paying for food.” The gathering I witnessed in the Burlington area felt like a different strand of practice than the gathering practices of the ginseng diggers. The two groups appeared to differ in how they implemented their gathering practices, in how they viewed nature, and in how they valued the products that they gathered.

I conceptualized gathering and gathering knowledge in my mind as a kind of metaphorical stream, both in terms of knowledge and practice. I was confronted with a conundrum: the two seemingly divergent gathering practices I had witnessed appeared to represent two very different currents of gathering. Most of the new gatherers I had met in Burlington were not gathering for money, ostensibly like the ginseng diggers, but were in search of novel foods from the wild. I began to ponder how the two types of gathering were similar, and how they differed. Did the gathering practices share a common source or wellspring, or were they divergent flows of knowledge and practice leading to different seas? I felt the stirrings of a research question emerging.

With those thoughts in mind, I crafted three simple research questions:

1. Why do people in Vermont gather?
2. What factors maintain or erode gathering practices?
3. Are there differences in gathering practices in Vermont, and if so, what are they?

We live in a world where we no longer need to hunt and gather for sustenance. Thanks to international trade, we can source fresh fruits and vegetables from our grocery stores even in the depths of winter. So what compels people in twenty-first century Vermont to gather? Some gatherers come back from forays with little to show for their efforts. In many ways, it appears to be an inefficient and irrational way to source food or medicine.

I thought back to the trappers and ginseng diggers. Their actions also appeared to contradict the rational choice theory - that is, the small corner of the rational choice theory literature encompassing human economic activities, not the wider realm of the rational choice theory which touches upon game theory (e.g., the prisoner's dilemma) and broader issues of social exchange (see Elster, 1986; Abell, 1991; Coleman & Fararo, 1992). The classic rational

choice interpretation of economic man, *Homo economicus*, posits that each individual maximizes scarce resources at hand for the greatest utility, interpreted as the best (usually financial) outcome to the individual (Becker, 1986; Bohman, 1992). As such, rational individuals will only engage in practices if the expected benefits from those activities exceed all other alternatives (Becker, 1986).

Given the centrality of the concept of maximization in the rational choice theory, the actions of the fur trappers and ginseng diggers appear “irrational.” That is, a rational calculation of the time and effort to produce a pound of ginseng or to procure and dry several animal pelts should involve shadow pricing to account for the investment in equipment (traps and scents for trappers) and time/labor, as well as additional expenses related to transportation to and from the harvest sites, and to and from the auction. Weighing such calculations, a number of attendees at the auction would likely find their investment of time in trapping or ginseng digging to be marginally profitable, if at all. In fact, one ginseng digger even admits as much to me in the cafeteria, telling me, “I could make more money working at McDonald’s flipping burgers than I do from ginseng.” Hinrichs (1998) also notes that maple sugar makers in Vermont continue to produce their product even in years when a, “strict cost accounting might suggest shutting down” (p. 528). The pursuit of furs or ginseng, or the making of maple syrup, is not able to be explained solely by an economic calculus, because other factors, such as preference of activity or disposition, influence an individual’s proclivity to engage in practice. The fur and ginseng auction, I conclude, appears to offer a window into an ingrained way of life operating on its own logic

Gatherers do not appear to adhere to the rational choice theory. In order to understand their reasons for gathering, I implement Pierre Bourdieu’s theories of practice and distinction.

Bourdieu is well suited for this analysis because he is a strong critic of the rational choice theory (Bourdieu, 1998). Bourdieu insists that people do not calculate balance sheets of gain and loss, with perfect market information, before engaging in practices. Rather, individuals undertake practices due to habitus - a set of dispositions, values and attitudes instilled from childhood. The Bourdieusian concept of habitus permits a deeper analysis of gathering practices because, while it takes into account economic rationales for engaging in practices, it also allows the researcher greater latitude to parse deep-seated differences in attitudes toward food, nature, health, and social status.

### **Why Vermont?**

Much of the research on gathering in the United States has been conducted in the Pacific Northwest because of the large markets for mushrooms and floral goods in the region (Schlosser, Blatner, & Chapman, 1991; Schlosser & Blatner, 1995; Blatner & Alexander, 1998; Pilz et al., 1999; Alexander, Pilz, Weber, Brown, & Rockwell, 2002; Muir, Norman, & Skiles, 2006). Scholars have been particularly interested in how gatherers interact with regulations imposed by federal land management agencies (e.g., the U.S. Forest Service, the Bureau of Land Management) in the Pacific Northwest (McLain, 2000; Pilz & Molina, 2002; Jones & Lynch, 2007). Fewer studies have looked at gathering as a phenomenon informed by local attitudes and beliefs, land tenure regimes, gatherer customs, socio-political structures and local markets. This is an important omission because a gatherer's practice is embedded within the broader socio-political context of his or her environment. That is, gathering practice is, in many ways, a function of place and culture. The dominance of the Pacific Northwest gathering experience in the literature gives the impression that gathering in the US is fractious along multicultural lines (Southeast Asian immigrants, Latino migrant workers, Native Americans and Euro-Americans in

competition for scarce resources), takes place predominantly on public lands and is driven by large commercial markets such as those for floral greens and edible mushrooms.

The use and marketing of plants and fungi in Appalachia has also received considerable scholarly attention. Wild plants and fungi play an important role in Appalachian livelihoods, providing food, medicine and supplemental income (Halperin, 1990; Greene, Hammett, & Kant, 2000). Annual use of wild foods such as morel mushrooms (*Morchella esculenta*, locally called “molly moochers”) and ramps (*Allium tricocum*) have become ingrained in Appalachian foodways, and their collection and consumption is a seasonal rite (Hufford, 2006). The region also has a rich, centuries-old tradition of using wild plants as medicines (Bolyard, 1981; Cavender, 2003; Cavender, 2006). The most celebrated medicinal in the region is ginseng (*Panax quinquefolius*), which has spawned numerous studies. These studies range from works describing ginseng’s importance to regional and personal identity and the institution of the commons (Hufford, 1997) and its ability to provide supplemental income in times of economic troubles (Bailey, 1999), to policy analyses of ginseng poaching (Pokladnik, 2008) and the failure of current regulations to adequately govern the root’s harvest (Burkhart, Jacobson, & Finley, 2012). In addition to established markets for ginseng and other medicinal plants, Appalachia also boasts robust markets for ornamental plants, including various mosses (Muir et al., 2006; Studlar & Peck 2007) and plants such as galax (*Galax urceolata*) (Emery, Ginger, & Chamberlain, 2006).

While the Pacific Northwest and Appalachia in many ways dominate the US gathering literature, relatively few scholarly studies have been published about gathering in New England. A few recent papers have focused on gathering practices in Maine (Baumflek, Emery, & Ginger,

2010; Ginger, Emery, Baumflek, & Putnam, 2012). Vermont, which boasts a long history of gathering (see chapter 4), has been largely absent from the US gathering literature.

This study will investigate the reasons for gathering among Euro-American inhabitants of Vermont, where private property is the dominant tenure system. I focus on Euro-American gatherers because they are the dominant group of gatherers in the state. According to the U.S. Census Bureau (2012), Vermont is the least ethnically diverse state in the nation, with 95.4% of its population classified as white. I did not attempt to include Abenaki gatherers or newly-settled immigrant refugee gatherers (e.g., Vietnamese, Somalis and ethnic Nepalis from Bhutan) because I am unfamiliar with those communities. Building the necessary trust with such groups would have required a great deal of time, and even had I accomplished such a feat, interviewing would likely have been complicated by cultural and language issues. I will attempt to include such groups in future gathering studies to test if the theories used in the current research are applicable to other cultures, or are relevant for comparing gatherers from different cultural backgrounds.

Vermont is a compelling location for research because it is a predominantly rural state with a long history of natural resource dependency (Albers, 2000). Having been a resident of Vermont for more than two decades, I believe I have gained a good understanding of some of the socio-economic issues at play in the state and am thus well positioned to carry out the research. Because place and culture has an influence on the theories that scholars develop concerning gatherer practices, greater attention needs to be given to under-represented regions in the literature. Barron and Emery (2012) note that gathering regulations and policies developed in the western half of the country, for example for mushrooms, have undue influence in other areas of the country. Such regulations and policies, they contend, are inappropriate to eastern areas,



like the Mid-Atlantic States, due to differences in tenure, markets, habitat and socio-cultural variables. McLain, Alexander, and Jones (2008) have underscored the need for greater flexibility in gathering policies across the US, noting the inappropriateness of one-size fits all regulations and calling for more place-specific policies. By studying Vermont gathering practices, I hope to provide greater depth, as well as geographical balance, to the current gathering literature in the US, thereby facilitating the development of better place-based gathering policies.

### **Relevance**

Previous research exploring the harvest of wild plant and fungal resources in the United States has sought to explain the phenomenon in purely economic terms (Schlosser & Blatner, 1995; Blatner & Alexander, 1998; Pilz et al., 1999; Alexander et al., 2002; Muir et al. 2006). Privileging an economic interpretation of gathering has in turn resulted in simplistic policy classifications of gathering as either a recreational, subsistence, or commercial activity (Anderson, Blahna, & Chavez, 2000; McLain, 2000; Carroll, Blatner, & Cohn, 2003). This policy typology of classifying gathering as commercial, recreational or subsistence reflects little understanding of the gatherer, neglects the mental and emotional importance of gathering, and fails to account for the fluidity in some gatherer's lives (some gatherers may gather under two or all three headings at various points in their lives). Greater understanding of non-commercial motivations for gathering, such as cultural traditions, has recently been identified by several researchers as a critical research gap (Anderson et al., 2000; Jones & Lynch, 2002; Carroll et al., 2003; Robbins et al., 2008). Anderson et al. (2000) state that, "...a knowledge of participants and their motivations is essential to designing appropriate management strategies for special forest products" (p. 759). The authors further avow that, "failure to make appropriate user group

and special forest product distinctions can lead to management decisions that are not in the best interests of the resources, special forest products gatherers, or even the agency (the US Forest Service) itself' (Anderson et al., 2000, p. 758).

For example, Alm, Blahna, and Chavez (2008) studied Asian gatherers of bracken ferns on a national forest in California. A survey of the fern harvesters revealed that the primary reasons for gathering were cultural (bracken fern is a traditional spring food in Korea and Japan), recreational (spending time outdoors) and social (spending time with family). The Forest Service, however, viewed the activity as a commercial activity and charged gatherers a \$20 permit. Three quarters of those surveyed said the fee was too high, and many gathered only about half of the poundage allowed under the harvest quota (40 pounds). Because the fern was an opportunistic species that was not imperiled by harvest, the permitting system appeared to be both punitive and unjustified.

This dissertation represents an evolution in my scholarship. For much of my career, I have addressed gathering as a conservation and development issue and used an economic or policy lens to analyze the subject. With this work, I embrace a sociological examination of gathering. This allows me to personalize the subject matter and focus on the lives and practices of gatherers. I believe that it is critical to understand differences in gathering practices because the practice of gathering itself is rapidly evolving and changing. The new emphasis on gathering as a means to obtain luxury foods (in much of the developing world) is bringing new groups of people into the gathering field. These groups in turn are changing attitudes and dynamics within gathering circles. Most significantly, as gathering has gained in stature, markets for wild edibles have expanded, impacting gathering practices as well as the resource base. Natural resource regulations, market regulations and health regulations are bound to grow in this burgeoning era

of gathering. Therefore, a better understanding of the reasons why people gather is critical to the formulation of appropriate, nuanced gathering policies.

## **Chapter 2: Gathering in the modern world – A literature review**

### **Introduction**

The subject of gathering has typically been the domain of anthropologists interested in pre-modern societies or ethnobotanists interested in plant use by indigenous groups in developing countries. In the late 1980s, gathering garnered scholarly attention because of its potential as a conservation and development strategy. During this era, a new sub-discipline, non-timber forest products (NTFPs), was christened (Sills, Shanley, Paumgarten, de Beer, & Pierce, 2010). Since that time, the study of gatherers in developed nations has become more common, although studies in developing countries still dominate the literature. The topic of gathering is by nature interdisciplinary and scholars have drawn upon research traditions from the fields of ecology, sociology, anthropology, and economics to study the phenomenon. Methodologies to examine gathering, and theories to explain its significance, have accordingly varied, problematically so in the eyes of some scholars (Neumann & Hirsch, 2000).

The term NTFP was coined in the late 1980s, largely in response to a perceived dominance of timber-centric thinking in forestry, conservation, and policymaking circles. NTFP is thus a political construct, promoted largely by private sector conservationists and academics. Unfortunately the term is not well-recognized by the political establishments that oversee NTFP management, harvest, and trade, specifically ministries of forestry, agriculture, taxation, trade, and health. Even in academia, the term is not fully accepted. Competing terms include “minor forest products,” “non-wood forest products,” “secondary forest products,” and “special forest products.”

In this study, I refer to the act of collecting wild floral and fungal goods as “gathering.” I find the terms “non-timber forest products,” “special forest products,” and “secondary forest

products” cumbersome and pejorative, because all of these terms begin with negative or diminutive descriptors. “Hunting” is a word still used the world over to describe the act of acquiring wild game. Its time-honored anthropological partner, gathering, is a simple, and I feel, elegant, descriptor which should be revitalized. That said, the following literature review focuses on the non-timber forest product (the most commonly used term by academics) literature because this is the moniker under which the majority of modern gathering studies is published.

### **Early years of the non-timber forest product literature**

Non-timber forest products (NTFPs), including fruits, nuts, tree latexes, mushrooms, resins, palm thatching, and other goods, have been harvested by humans for use as food, medicine, crafts and construction materials for millennia. Recent studies estimate that nearly 1.5 billion people around the globe use non-timber forest products (Shackleton, Delang & Angelsen 2011). In the late 1980s, conservationists seized upon NTFPs as an innovative forest conservation tool to alleviate tropical deforestation. If local communities and tropical nations were shown the value of goods from standing forests, such as Brazil nuts, rubber and rattan – the logic went - then rampant clearing of tropical forests could be averted. A number of studies emerged purporting to demonstrate the economic superiority of NTFP production on an acre by acre basis, over the long term, as compared to logging, ranching and other competing land uses (Peters et al., 1989, Nepstad; Brown, Luz, Alechandra, & Viana, 1992; Grimes et al., 1994). NTFPs were subsequently promoted as a means to achieve tropical forest conservation and came to be viewed as a type of conservation “silver bullet.” Conservationists claimed that tropical forests could be saved from the chainsaw while yielding profitable, marketable goods, such as “Rainforest Crunch” thereby creating a “win-win solution.”

However, NTFP valuation studies such as those by Peters et al. (1989) and Grimes et al. (1994) were soon attacked by researchers on the basis of site selection, assumptions about prices and marketability of NTFPs, failures to recognize price elasticity or variability in tropical forest yields, and presumptions of sustainable harvest levels (Godoy & Lubowski, 1992; Pendelton 1992; Godoy et al., 1993; Godoy & Bawa, 1993). Browder (1992) criticized NTFP proponents for ignoring the social costs of NTFP extraction in local communities, citing social problems relating to poverty, poor education and inadequate health care among gatherers and their families. Other authors chided the movement for promoting commoditization of safety net resources used by local communities (Dove, 1994).

Homma's (1992) influential paper on the economic history of forest product extraction in Amazonia dealt a major blow to NTFP champions. Homma (1992) predicted that commercialization of NTFPs would lead to over harvest of the resource base, which in turn would necessitate cultivation or substitution effect in order to meet sustained demand. Homma's thesis was compelling because it explained the fate of many NTFPs, from the domestication of former forest crops such as coffee, vanilla and rubber, to the extinction of the ancient medicinal plant silphium (Koerper & Kolls, 1999) and near extirpation of Asian ginseng from the wild, to the substitution of plastic bottle stoppers for cork stoppers and the replacement of once naturally-derived forest medicines by synthetic pharmaceuticals (e.g., aspirin and dopamine).

### **Scope of the non-timber forest product literature**

The non-timber forest product (NTFP) literature is vast (see von Hagen, Weigand, McLain, Fight, & Christensen, 1996; Neumann & Hirsch, 2000; Maille, 2001; Pierce, 2009; McLain et al., 2012). For much of the 1990s and early 2000s, the debate over the use of NTFPs as a conservation and development tool took center stage, featuring critics (Browder, 1992;

Pendelton, 1992; Dove, 1994; Crook & Clapp, 1998) as well as proponents (Peters et al., 1989; Allegretti, 1990; Clay, 1992; Grimes et al., 1994; Shackleton, 2001). In subsequent years, even its champions tempered their initial optimism about NTFP commercialization as a conservation and development tool. It is now widely acknowledged that the success of NTFP commercialization projects is, unsurprisingly, highly dependent upon contextual factors such as technical assistance and enabling policy environments (Michon, 2006; Marshall et al., 2006; Belcher & Schreckenberg, 2007; Laird et al., 2010). Even so, NTFP projects can still produce negative ripple effects such as the creation of “winners and losers” within local communities (Rigg, 2006).

As the field grew and matured, scholars began studying a wide array of topics touching on every aspect of NTFPs as they moved from forest to market. Below, I quickly summarize some of the main ecological, social and economic areas of research relating to NTFPs. This is not an exhaustive treatment of the literature; the main intention is to demonstrate the depth and breadth of the field. I then discuss some of the methods and critical frameworks that scholars have used to date.

The management and harvest of NTFPs has spawned a large body of literature which examined a variety of issues including:

- Sustainable management and sustainable harvest levels for target species (Peters, 1994; Endress, Gorchov, Peterson, & Serrano, 2004; Ticktin, 2004; Peck & Christy, 2006; Schmidt, Figueiredo, & Scariot, 2007; Ticktin & Shackleton, 2011);
- Forest management regimes for the joint management of timber and non-timber forest products (Laird, 1995; Pilz, 1996; McLain & Jones, 2005; Guariguata, Cronkleton, Shanley, & Taylor, 2008; Rist et al., 2012);

- Integration of gatherer knowledge into forest management planning and forest policies (McLain & Jones, 2001; Emery, 2001; McLain & Jones, 2005; Jones & Lynch, 2008; Charnley, Fischer, & Jones, 2008);
- Criteria and indicators for the certification of best management practices for NTFPs (Shanley, Pierce, Laird, & Guillén, 2002; Pierce & Laird, 2003; Shanley, Pierce, Laird, & Robinson, 2008).

Numerous articles on social issues relating to the management, harvest and trade of NTFP have been published in the last two decades. Access and tenure issues are a primary focus of NTFP researchers the world over, from British Columbia (Tedder, 2008), to Washington State (Lynch & McLain, 2003), to Maine (Ginger et al., 2012), to Scotland (Emery, Martin, & Dyke, 2006), Cambodia (Baird & Dearden, 2003), Southern Africa (Wynberg & Laird, 2007) and Latin America (Pendelton, 1992; Cronkleton & Pacheco, 2010). Brown and Lapuyade (2001) and Coulibaly-Lingani, Tigabu, Savdogo, Oden and Ouadba's (2009) work further deepened the theme of NTFP access by examining gender differences in access to NTFPs in Cameroon and Burkina Faso, respectively.

Equity, encompassing the issues of access and benefit-sharing and protection of traditional knowledge, occupies a large, and contested, area within the NTFP literature. Much of this literature focuses on how countries are planning to implement access and benefit-sharing agreements in line with the provisions of the Convention on Biological Diversity and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS), which is administered by the World Trade Organization. This complex and rapidly evolving arena describing the intersection of international agreements, biodiversity, and equity has been covered by numerous scholars (e.g., ten Kate & Laird 1999; Dutfield, 2000; Tobin & Swiderska, 2001;



Laird, 2002; Dutfield, 2004; Finger & Schuler, 2004; McManis, 2007; Laird & Wynberg, 2008; Kamau & Winter, 2009; Wynberg, Schroeder, & Chennells, 2009; Oberthür & Rosendal, in press). Other literature congruent to the access and benefits literature focuses on the pros (Kursar et al., 2006) and cons (Barratt & Lybbert, 2000; Greene, 2004; Swiderska, 2006) of bioprospecting by western pharmaceutical companies in southern countries possessing great biological wealth. Rosendal (2006) opines that much of the interest in benefit-sharing, intellectual property rights, and traditional knowledge is driven by the economic potential of discovering new patentable medicines. While some access and benefit-sharing texts are clearly geared toward economic issues and use legal terms extensively, there are other works in the field that stress environmental justice as an overriding theme.

The working and living conditions of gatherers employed in commercial NTFP operations is another research arena that has attracted attention from social scientists. Authors such as Browder (1992) and Pierce (2002a) described the difficult living conditions of NTFP gatherers in Amazonia, including inadequate health care, lack of access to education and the persistence of debt-peonage systems. The impact of globalization on NTFP labor forces has also been explored. For example, Lynch and McLain (2003) and McLain and Lynch (2010) examined the changing face of the NTFP floral greens labor force in the Pacific Northwest, which witnessed a recent increase in immigrant gatherers of Latino and Asian descent. According to McLain and Lynch (2010), the growth of the floral greens industry resulted in increasing incidences of poaching, which in turn precipitated governmental attempts to control gatherers through the enforcement of harvest permits, labor laws and immigration laws. Northern Scandinavia's wild berry crops likewise draws migrant workers from as far away as Thailand, Ukraine and Belarus. As in the case with the Pacific Northwest, the influx of

immigrant gatherers creates the perceived need, on the part of governments, to tax, register and control migrant gatherers (Richards & Saastamoinen, 2010).

The subject of NTFP commerce, at local, regional and global scales, represents another distinct niche in the NTFP field. Of particular interest to experts is the impact of trade regulations on NTFPs in international commerce (for an overview, see Iqbal, 1995; Pierce & Burgener, 2010). Lange and Schippmann (1997) described the various tariffs and regulations bearing on the importation and exportation of medicinal and aromatic plants in Germany, one of the largest international hubs in the global medicinal plant trade. Lange (2006) later provided a global overview of trade in medicinal and aromatic plants and provided statistics on volumes of species in trade, major importing and exporting nations, and the myriad regulations governing their trade.

Other authors have examined species-specific trade regulations and their sometimes perverse negative impacts on the livelihoods of gatherers. For example, Newing and Harrop (2000) examined how the European Union's (EU) strict sanitation standard on aflatoxin levels in Brazil nuts (*Bertholletia excelsa*) acted as a trade barrier to Brazilian producers. Other scholars demonstrated how trade regulations often contradicted economic development goals, for example in the cases of trade in sandalwood (*Santalum macgregorii*) (Bun & Bewang, 2005) and the African medicinal plant devil's claw (*Harpagophytum procumbens*) (Lombard & du Plessis, 2003). The impact of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) on NTFPs in commerce spawned its own literature as well, focusing on specific species - the African medicinal *Prunus africana* (Cunningham, Cunningham, & Schippmann, 1997), American ginseng (*Panax quinquefolius*) and goldenseal (*Hydrastis canadensis*) (Robbins, 1999), and Asian medicinal plants such as *Rauvolfia serpentina* (Mulliken

& Crofton, 2008) - as well as broader overviews of the treaty's impact on the conservation, management, and trade of endangered NTFP species (Burgener, 2007; Mulliken, 2009).

### **Methods and analyses used by NTFP scholar**

Research methods used in NTFP sustainability studies generally include forest inventorying, implementation of varying harvest prescriptions, and follow-up field analysis on regeneration/species response to harvest. In general, across the ecological, social, and economic spectrums of the NTFP literature, the most widely used research method appears to be the case study (e.g., Sunderland & Ndoye, 2004; Shackleton & Shackleton, 2004; Belcher, Ruiz-Pérez, & Achdiawan, 2005; Aiyelaja & Ajewole, 2006; Marshall et al., 2006; Gubbi & MacMillan, 2008; Heubach, Wittig, Nuppenau, & Hahn, 2011). Surveys have also been popular research tools. Economic analyses of NTFPs often employ shadow pricing. In-depth qualitative interviews of gatherers are common, and most studies of this kind focus on harvester knowledge or livelihoods, with fewer reporting on gatherer responses to law and policy (some exceptions being McLain, Christensen, and Shannon, 1998; Larsen, Olsen, & Boon, 2000; McLain, 2000; Pandit & Thapa, 2003). Ethnographic methods predominate in research involving harvesters (e.g., McLain, 2000; Jones, 2002; Emery et al., 2006; Zanotti, 2009; Ginger et al., 2012).

Scholars have used discourse analysis to parse and categorize conflicting visions of stakeholders in the formulation and implementation of forest policies that impact NTFPs (e.g., Humphreys, 2004). Other authors have applied concepts of participation or democracy to elucidate struggles in forest policy-making processes that impinge on NTFPs (Ribot, 1995; Tobin & Swiderska, 2001). Commodity chain analysis/value chain analysis has proven to be a useful critical analysis tool for scholars studying NTFPs in commerce, because it identifies power relations between actors and facilitates the mapping of the distribution of benefits from

NTFP trade (Ribot, 1998; te Velde et al., 2006; Jensen, 2009; Tugault-Lafleur & Turner, 2009; He, 2010; Choocharoen, Schneider, Neef, & Geogiadis, 2013).

Political ecology has provided a basis for some of the most insightful NTFP studies to date because the discipline addresses sociostructural as well as environmental variables (Jones & Lynch, 2002). Scholars have used the political ecology lens to analyze power conflicts between NTFP gatherers and the state, particularly with regard to resource access, permit processes and law enforcement (Peluso 1992; Larsen et al., 2000; McLain, 2000; Ojha, Cameron, & Kumar, 2009). Others have examined conflicts between groups of gatherers, whether they be competing villages in China (Yeh, 2000) or competing ethnic groups (Latinos, Asians, Euro-Americans and Native Americans) in the US northwest (Richards & Creasy, 1996; Hansis, 1998; Carroll et al., 2003). Hurley and Halfacre (2011) effectively used a political ecology lens to demonstrate how residential development in coastal South Carolina threatens access to, and marketing of, sweetgrass resources, a lowland plant used in traditional basketry by the Gullah, descendants of formerly enslaved Africans.

Much of the NTFP literature is descriptive in nature. Discourse analysis, the diverse economies literature (described below), commodity chain analysis, and political ecology have all provided useful frameworks for NTFP researchers and produced in-depth critical analyses that have deepened the understanding of NTFP management, harvest and trade. However, the NTFP literature, to date, has been largely atheoretical (Pierce, 2010). One, now classic, exception is the work of McLain (2000). Using Foucault's theory of disciplinary power, McLain compared the U.S. Forest Service's regulations for the harvest and sale of wild mushrooms from federal lands to a panopticon.

## **Frameworks to describe the persistence of NTFP gathering in developed countries**

Although hopes of using NTFP development schemes as conservation tools were tempered by Homma (1992) and other critics, many proponents persisted in their attempts to advance NTFPs as economic alternatives to timber-based economies in temperate forests such as the U.S. Pacific Northwest. In the US, when logging and milling jobs evaporated in the Pacific Northwest due to over-harvest, environmental protests, and the spotted-owl controversy, some scholars and conservationists posited that the mushroom and floral greens industries would fill much of the economic void in a post-timber economy (Mater Engineering, n.d.; Freed, 1997; Schlosser & Blatner 1995; Blatner & Schlosser 1998). While commercial collection of some products, such as matsutake mushrooms, proved lucrative, NTFPs never came close to replacing the jobs and income produced by the timber industry.

In most cases, NTFPs provided an unsteady source of supplemental income for people willing to work long, hard hours. As researchers began to realize the economic limitations of NTFPs (in terms of secure employment and steady markets), new questions emerged. NTFPs, it was soon realized, were nothing new. They had been gathered in the US for centuries. So what was the impetus driving many gatherers? Homma's (1992) thesis, while brilliant and compelling, was predicated upon two implicit assumptions: 1) capitalism replaces all other modes of production, and; 2) people respond to the world in a purely profit-driven manner. While Homma and neoclassical economic assumptions generally prevailed as a normative discourse for examining gathering, a few scholars made new inroads by viewing gathering as a manifestation of local socio-economic processes and structures.

## **The diverse economies literature**

The diverse economies literature in particular offered some fruitful explanations for the continuation of gathering in developed countries such as the US. Gathering constituted one of a number of strategies that individuals employed to cope with shortfalls of the capitalist economy (Wallerstein, 1979), particularly in areas poorly served by markets (e.g., rural areas). For example, Bailey (1999) found a positive correlation between ginseng harvest and unemployment in West Virginia; during hard times, many out-of-work local residents turned to the woods to earn supplementary income from digging the root. Emery (1998) found similar circumstances in the Upper Peninsula of Michigan, and later, along the eastern seaboard of the country (Emery, Ginger, Newman, & Giamusso, 2003). In both regions, residents relied on income from gathering to help them through times of unemployment, disability leave, or in retirement years when income was scarce. Halperin (1990) likewise documented numerous non-market strategies of survival in rural Kentucky, including gardening and gathering of forest products.

Gathering as a response to shortfalls of the marketplace logically fell within the households literature, yet most treatises on households tended to examine non-wage work such as child care, meal preparation, and book keeping, rather than gathering (Portes, Castells, & Benton, 1989; Smith & Wallerstein, 1992). Although capitalism is largely seen as the triumphant economic system in the world today, household self-reproduction continues and is an integral means of economic survival for a number of US households. The continuing contributions of hunting, fishing, and gathering to household economies supports the notion that the neo-liberalist agenda is not all-encompassing; rather there are pockets across the US where communities are interrupting the telos and continuing to rely upon forest resources for income and sustenance (Emery & Pierce, 2005).

Gibson-Graham (1996) extended the debate, contending that alternative economic activities such as household self-reproduction represent not just a protest against the market economy, but offer new possibilities to re-organize economic activities outside of normative structures. These alternative economic activities allowed practitioners to re-conceptualize human-human and human-environment relationships, and re-shaped attitudes toward surplus and the distribution of goods. For Gibson-Graham (1996), economists on both the right and left accorded capitalism too much attention, thereby ignoring the potential for the existence of economic spheres operating tangentially to the sphere of capitalism. Shanin (1990) and Chayanov (1986) followed similar thought processes and argued that Russian peasant systems of self-reproduction operated in similar ways that were distinct from, and yet articulated with, the capitalist and state-planned economic systems.

McLain et al. (2008) produced an excellent review of the informal economies literature. Using non-timber forest products as a case study, they discussed how the federal and state governments in the Pacific Northwest have attempted to exert nation-state control over gathering through the implementation of haul permits, gathering permits, stricter reporting requirements for NTFP buyers and stricter labor laws. Yet the authors note (McLain et al., 2008, p. 34) that, “the informal economy cannot be regulated away, nor, as the literature synthesized in this report indicates, is it necessarily desirable to do so.” The benefits of an informal economic sector, such as the NTFP sector, they note, provide important livelihood functions and offer cultural and spiritual benefits to its practitioners as well.

The modern subsistence literature dovetails with the households and diverse economies literature to further explain the persistence of gathering activities which do not fit into neoclassical economic assumptions. While pure autarky is no longer viable even in the most

remote areas of the US, subsistence, defined as “a resource-dependent lifestyle characterized by a pattern of social and economic activities that include some combination of hunting, fishing, gathering, ... trading, bartering, resource sharing and household or village-level consumption” (Muth, Dick, & Blanchard, 2001, p. 331), persists. A literature review by Emery, Pierce, and Schroeder (2004) suggests that subsistence is practiced in all regions of the US by a variety of ethnic groups. Subsistence, argues Dick (1996), is more than just a means of assuring physical and economic well-being, it is a complex, embedded social system of norms, values and customs.

### **Frameworks to explain non-economic dimensions of gathering**

The diverse economies literature explains why a gatherer pursues his or her activities in terms of income attainment, self-provisioning, and employment limitations. Yet research into the non-economic dimensions of gathering in developed nations has been limited to date. Kardell (1980) and Pouta, Sievänen, and Neuvonen (2006) characterized berry gathering in Sweden and Finland, respectively, as “recreational,” but did not delve into why they labeled the practice as such. Kardell (1980) estimated the economic value of berries and mushrooms in Sweden, while Pouta et al. (2006) linked berry gathering to maintenance of a “rural lifestyle.” However, the meaning of the activity to its practitioners was not fully explored and developed.

Richards and Creasy (1996) looked at the motivations of gatherers of a commercial product (matsutake mushrooms) and demonstrated that non-commercial motivations could indeed dominate among sub-populations of gatherers. By contrast, Anderson et al. (2000) examined a commercially insignificant product that was treated as a commodity by the US Forest Service and aptly demonstrated the risible nature of the prevailing commercial/non-commercial dichotomy that is applied to gatherers. Hinrichs (1998) further subverted neoclassical,



economic-oriented thinking about NTFPs by studying a well known commercial item and arguing that its production was motivated not only by needs for supplemental income, but also, and in many cases primarily, by reasons relating to culture and identity.

Granovetter (1985) set the stage for drawing social research into economic studies, pointing out that economists have neglected the structures and relationships wherein such activities are embedded. Hinrichs (1998) and Carroll et al. (2003) specifically applied Granovetter's concept of social embeddedness to gathering in the US, looking at maple syrup and huckleberries respectively. Both Hinrichs (1998) and Carroll et al. (2003) found rich and complex underlying social structures, norms, values and traditions that determine gathering motivations and practices.

Another scholarly explanation for the perpetuation of gathering in post-industrialized countries involves culture. Richards and Creasy (1996) characterized the collection of matsutake mushrooms as a Native American cultural activity in Northern California while Carroll et al. (2003) described huckleberry harvesting in the northwest as a Native American cultural activity. Anderson et al. (2000) framed the gathering of bracken fern by gatherers of Korean and Japanese descent as a recreational and social activity. But because the bracken fern is a traditionally eaten seasonal green in Korean and Japanese cuisine, Anderson et al.'s (2000) work, and later Alm et al.'s (2008) work, both underscored the importance of culture as an explanation for the continuation of gathering practices. Barr's (2005) story of Korean mugwort gatherers running afoul of city park managers in the Washington, D.C. area further supported the usefulness of viewing some contemporary gathering practices as manifestations of ongoing cultural activities. Cocks, López, & Dold's (2011) work demonstrated that urban and peri-urban residents in South Africa and Mexico continued to use NTFPs for reasons related to identity, ties to rural practices,

and maintenance of cultural practices. Given the highly mobile nature of today's world, more studies that examine the cultural importance of NTFP gathering and use are warranted in the US and beyond.

For all its explanatory power, the diverse economies literature cannot fully account for why sugarmakers or ginseng diggers spend great amounts of time pursuing their activities. Consider maple syrup producers who, “laughingly estimate their return on their labor to be ‘oh, about a nickel an hour’” (Long, 1995, p. 15). If some maple syrup makers do indeed make less than minimum wage when viewed through a classic economic calculus, what other factors drive them to make syrup annually? Supplemental cash is only a partial answer. Other factors, particularly mental and emotional factors, must also be considered. Yet despite calls from multiple scholars to examine the non-commercial motivations of gatherers (Anderson et al., 2000; Jones & Lynch, 2002; Carroll et al., 2003; Robbins et al., 2008), few studies have examined the phenomenon in depth.

Anderson et al. (2000) used a multiple choice survey to ask gatherers about reasons for collecting bracken ferns, and provided options such as “enjoy spending time outdoors,” or “enjoy spending time with family.” However, the authors did not discuss how they formulated the options listed on the surveys. The survey was a useful way to collect data from a large number of gatherers who purchased fern collecting permits, but because the survey limited respondents to a pre-determined set of reasons for gathering, it was unable to deeply explore reasons for gathering.

Outside of the Anderson et al. (2000) paper, relatively few published studies have attempted to delve into detail about gatherers' reasons for gathering. Jones and Lynch (2002) mentioned the importance of gathering as a means of connecting to nature, albeit cursorily.

Wilsey and Nelson (2008) looked at motivations of balsam bough pickers in Minnesota and framed their analysis in terms of gathering as a lifestyle or livelihood. Wilsey and Nelson (2008) reported a number of reasons given for gathering, including enjoyment of nature, making money, and spending time with family. However, their use of the cultural keystone product as a means of comparison of motivations within and between products still privileged economics as the principle organizing reason for gathering. More recently, Poe, McLain, Emery and Hurley (2013) described a number of non-material reasons for urban gathering, including connecting with nature, sharing knowledge, and maintaining cultural practices.

To date, few NTFP scholars have explicitly described, in depth, the psychological and emotional benefits of gathering. NTFP scholarship has not yet fully linked gathering to the large and emerging field of ecological psychology. It is widely accepted that time spent in local environments is not only healing but may also foster a sense of place as well as a sense of identity (Tuan, 1977; Proshansky, Fabian, & Kaminoff, 1983; Low & Altman, 1992; Cuba & Hummon, 1993; Stedman, 2002). Relph (1976) claims that self-concepts of identity are informed by one's physical settings as well as by the activities undertaken within those settings and the meanings that individuals assign to each. For some gatherers, it is conceivable that gathering provides not only a bond with the local environs but reinforces perceptions of identity.

In today's fast-paced, technological world, time spent in nature is viewed as a stress-reducing tonic (Ulrich, 1983; Kaplan & Kaplan, 1989; Lewis, 1996; Louv, 2005). The benefits of human interactions with plants are particularly important and represent an atavistic link with our hunter-gatherer past (Lewis, 1996). "Contact with green nature," writes Lewis (1996), "is essential to well-being and offers peace and assurance" (p. xviii). O'Brien (2006) bolsters this point, noting that research has repeatedly shown that access to nature results in improvements to

human health and well-being. Many authors such as Kaplan (1995), Lewis (1996), Kidd and Barascamp (2004) and Salsedo (2007) have extolled the restorative benefits of human-plant interactions, particularly in the form of gardening. Fewer authors have examined the psychological benefits of gathering, including potential mental and psychical health benefits.

Ulrich (1983) contends that time in nature reduces feelings of stress in humans, but does not address the root cause of stress, namely the inability to sustain directed attention. Kaplan (1995) counters that time in nature not only reduces stress but allows humans to regain directed attention if time outdoors is spent purposefully focusing on an activity (bird watching, botanizing, or, perhaps, gathering). Thus, time spent in nature may not only be calming, but rejuvenating as well. By more fully examining some of these non-economic factors, I hope to demonstrate the emotional and psychological benefits of gathering to its practitioners.

### **Bourdieu and Foucault**

According to Webb, Schirato, and Danaher (2002), the work of French sociologist Pierre Bourdieu has had a profound impact on contemporary cultural theory in fields as diverse as cultural studies, literary studies, anthropology, sociology, philosophy, gender studies, psychoanalysis, and film and media studies. Webb et al. (2002) opine:

His concepts of habitus, field and capital, for instance, constitute what is arguably the most significant and successful attempt to make sense of the relationship between objective social structures (institutions, discourses, fields, ideologies) and everyday practices (what people do and why they do it). (p. 1)

Bourdieu's (1977) concept of practice seeks to explain what people do in their everyday lives. The central building blocks in Bourdieu's theory of practice are *habitus*, *capital* and *field*. Habitus refers to lasting dispositions - perceptions, beliefs, and values - acquired through the socialization process (most notably from family, the education system, and community) from a very young age. The habitus embodies learned attitudes toward various subject matters such as

money, gender relations, and nature, and predisposes individuals to behave in certain ways from context to context. The habitus is also manifested physically through bodily comportment – gestures, accent, and the way one carries oneself in the world. Notes Fries (2009), “the habitus is culture-made flesh” (p. 331).

Capital includes economic capital (money or property), social capital (an individual’s social network), cultural capital (art, literature, music, and education, as well as diplomas or certifications which confer “competence”) and symbolic capital (honor and prestige, sometimes legitimated by a title, such as duke or doctor).

A field is a social setting with its own structures, rules and hierarchies, within with individuals struggle for various forms of capital (for example, a profession such as politics, acting, academia or the law). The field, in the case of gathering, may constitute the broader local economy (when viewing gathering as a livelihood strategy) or the gathering “profession” itself, wherein there is competition amongst gatherers, as well as between gatherers and the state.

The concepts of habitus (largely the subjective force of an individual), field (object structures within which the habitus interacts) and capital, though relatively simple in concept, provide researchers with powerful analytical tools. To date, the concept of practice has been widely used in anthropology and sociology, as well as in cultural studies and the field of academia. Practice has not been as widely used in the environmental field, although that is changing.

For example, Kawamura (2004) applied Bourdieu’s theory of practice to the contemporary Nez Perce to explain how their hunting, fishing, and gathering practices transcend a materialist- (calorie intake) idealist (ethnic identity) dichotomy to encompass political, social, and symbolic aspects that maintain cultural cohesion and identity. Robbins et al. (2008)

characterized gathering in the northeastern US as a type of practice. However, rather than using Bourdieu, they applied de Certeau's (1988) concept of practice, and theorized gathering as a subversive tactic employed against hegemonic forces bent on controlling, partitioning, and defining human life and behavior.

Ojha et al. (2009) drew upon Bourdieu's concepts of doxa (shared opinions and beliefs, or the agreed-upon "rules" structuring a social space) and symbolic violence (domination within a field) to deconstruct power relationships in the governance of community forests in Nepal. Ojha et al. (2009) found that elites used political and technocratic doxa as well as symbolic violence to perpetuate inequality and exclude actors from deliberative processes. While their paper does not specifically address NTFPs, it is highly relevant because of the widespread use of NTFPs in community forests in Nepal.

Balooni, Lund, Kumar, and Inoue (2010) likewise used social capital to elucidate differences in power struggles between two joint forest management projects in India. The authors contrasted Bourdieu's concept of social capital with that of Coleman (1988) and Putnam (1993). Bourdieu's social capital was portrayed as a negative instrument used to support and reproduce dominance by the elite classes, while Coleman and Putnam's concept of social capital was defined as a collective asset useful to all members within the community. Basure, Taru, and Mutangi (2012) used a Bourdieusian analysis to dissect the use of woodlands by resettled populations in Zimbabwe. The authors contrasted differences in power between the village head and villagers, and described woodland access as a form of social capital and medicinal knowledge as a form of cultural capital.

A number of authors have used power and social hierarchy to illustrate unequal access to forest resources such as NTFPs. Jacoby (2001), for example, described how robber barons from

the Atlantic seaboard bought land in the Adirondacks region of New York to build vacation retreats, and in the process excluded local residents from forests traditionally used for hunting, fishing and gathering. In Western Africa, noted Ribot (2001, p. 1), “a dual system of control and management” of forest resources produces “separate spheres of profit and use,” wherein high value products are captured by elites leaving little for the local poor. Larson and Ribot (2007) maintained that such policies are not unique to Western Africa, but prevail across much of the developing world, where forest policies perpetuate social inequity and maximization of profit for foreign and urban elites. Balooni et al. (2010) likewise described how Joint Forest Management, a forest devolution strategy aimed at empowering local communities, is often co-opted by local elites to the detriment of the poor.

Ribot and Peluso (2003) revitalized the debate over forest access by theorizing access as a “bundle of powers” rather than a “bundle of rights,” as traditionally defined under the rubric of property. For Ribot and Peluso’s (2003), forest access is, “located within social and political-economic contexts that shape people’s abilities to benefit from resources” (p. 173). Thus access to forest resources is ultimately equivalent to access to power, because it is dependent upon access to technology, capital, markets, labor, knowledge, and social networks. While I did not uncover power issues relating to access due to class in my research, this literature is complementary to Bourdieu and Foucault.

Like Foucault (1979), Bourdieu is interested in power dynamics. Bourdieu’s work has the potential to deepen our understanding of interactions within the gathering field, as well interactions between the gathering field and other fields, such as the regulatory field. Foucault’s work is useful for describing the power dynamics between gatherers and institutions attempting to control and monitor them (see McLain 2000). Bourdieu’s work can complement Foucault’s

work by revealing the power struggles between gatherers competing for capital *within* the gathering field. According to Reckwitz (2002), Foucault's later works can be characterized as "praxeological," thus providing further room for complementarities in the application of Foucault's and Bourdieu's theories to NTFPs. Bourdieu's work offers further advantages as it can be used to parse differences in gathering practices by the attitudes and values (the habitus) of its practitioners.

### **Summary**

The NTFP literature is large and multi-disciplinary. Scholars in forestry, sociology, anthropology, geography, economics, conservation biology, mycology, food sciences, folk life and a host of other disciplines have published work relating to the field. Due to its broad scope, the discipline of NTFP studies does not follow any one particular research method, nor does it adhere to a discreet set of critical frameworks or theories.

Much of the initial NTFP literature has focused on gathering in the tropics. However, in the last twenty years, a large body of literature on gathering in post-industrialized countries has been published. The tropical gathering literature focuses mainly on conservation and development, with social dimensions such as land tenure, equity and working conditions featuring prominently. In the temperate NTFP literature, scholars have generally used one of the following lenses to explain the persistence of gathering practices:

- by characterizing gathering as a commercial, subsistence or recreational activity;
- by describing gathering as a cultural activity;
- by depicting gathering as a livelihood strategy and applying the diverse economies literature;
- by portraying gathering as an expression of social embeddedness;



- by theorizing gathering as a form of practice.

Few studies have explored the emotional and psychological benefits of gathering and related the findings to the ecological psychology literature. Such research is needed to provide a more rounded understanding of why gathering persists in developed nations (beyond the simple categories of “commercial,” “recreational,” and “subsistence”). A fuller understanding of why gatherers gather holds great utility for NTFP researchers interested in using Q sort analysis, for example. In Q sort methodology, researchers must create a “concourse” of statements which represents all of the possible sentiments about gathering. While Anderson et al. (2000) used statements such as “enjoy spending time outdoors” and “enjoy spending time with family” in their survey (which was not a Q study), they did not include statements about emotional aspects of gathering such as “provides mental relaxation,” or “strengthens bonds to place.” I hope that by delving deeper into the emotional and psychological reasons for gathering, I can expand upon the existing understanding of gathering and contribute to a more holistic “NTFP concourse.”

To date, the NTFP literature has been largely atheoretical. By using Bourdieu’s theory of practice, I hope to advance the application of theory to the field. Bourdieu is an appropriate theorist to build upon because his work complements some of the political ecology papers already published in the field, particularly those focused on power dynamics. In particular, Bourdieu’s work demonstrates congruence with theorist Michel Foucault, whose disciplinary power theory was fruitfully applied to describe the mushroom permitting process in the US Pacific Northwest (McLain 2000).

## Chapter 3: Methods

### Introduction

This study is an interdisciplinary investigation into the practices of a distinct sub-population, namely gatherers. I employed a hybrid research methodology, relying heavily upon techniques used in the western ethnographic tradition while borrowing questioning techniques from the field of psychology, specifically the life story method. I used open-ended, in-depth interviews, a common questioning method of ethnographers.

This study is not an investigation of culture, which is one classic focal point of ethnographies. Nevertheless, ethnographic methods appear to be appropriate because they are one of the best ways to discover the *emic* perspective, or the insider's view (Fetterman, 1998), on gathering. Furthermore, ethnographic methods are well-suited for exploring the origins of cultural phenomena and framing actions and beliefs within socio-political and historical contexts (LeCompte & Schensul, 1999). As Geertz (1973) aptly remarks, ethnography is "another country heard from" (p. 23).

Although gatherers live in our midst, their lives remain largely concealed from the public. Previous dissertations on gathering in the US (Emery, 1998; McLain, 2000; Jones, 2002; McBride, 2004) have fruitfully used ethnography to advance understanding of gatherers and gathering practices, thus the method has a tradition in the gathering literature. For example, Emery (1998) used the rich descriptions of her interviewees to portray how gathering allowed them to weather economic vicissitudes in Michigan's rural Upper Peninsula.

As Hammersley and Atkinson (1995) note, the boundaries between ethnography and other types of qualitative inquiry are unclear. I followed Miles and Huberman's (1994) methods for inductively coding my data to obtain my descriptive analysis. I subsequently added a

deductive, thematic analysis on top of the inductive coding to separate themes for a Bourdieusian analysis. Because overcoming the subjective/objective antimony is central to Bourdieu's vision of sociology (Bourdieu, 1989 – this will be discussed further in the analysis chapter), I believed that a coding method using both inductive as well as deductive methods is appropriate. As Joffe (2011) remarks, using both inductive and deductive approaches together is an analytical strength because, “one goes to the data with certain preconceived categories derived from theories, yet one also remains open to new concepts that emerge” (p. 210).

Thematic analysis, note Braun and Clarke (2006), “is a poorly demarcated and rarely acknowledged, yet widely used qualitative analytic method within and beyond psychology” (p. 77). Thematic analysis offers flexibility, is relatively easy to grasp for newcomers to qualitative research (such as myself), is well-suited for large bodies of data (my transcripts ran over 700 pages in length, single-spaced), and elucidates similarities as well as differences across a data set (Braun & Clarke, 2006). Because my research aims to answer why gatherers gather, a research analysis method with a track record in psychology seems appropriate. Braun and Clarke (2006) contend that “thematizing meanings” is a basic component of most qualitative research traditions, including discourse analysis, grounded theory and narrative analysis – analytical methods commonly used in ethnographies. Thus my questioning and coding methods have standing in both the psychology and ethnographic traditions.

### **Sampling**

The participants in this study were Vermont gatherers with the following characteristics: 1) they largely gather on property that they do not own; 2) they harvest wild plants and fungi annually and have done so for a period of more than five years; and 3) they plan their gathering forays each year and demonstrate an active relationship with the wild resource (e.g., maintain

access rights to harvest areas, create maps of gathering areas, “wild tend” plant populations to enhance production, and/or keep gathering diaries).

I used a combination of targeted and snowball sampling methods to identify Vermont gatherers. I targeted two main groups of gatherers - ginseng diggers and mushroom collectors - because these cohorts feed disparate markets, represent distinctive knowledge sets and have different histories of product use. I made contact with the target populations by consulting the Vermont Ginseng Association, watching for public notices advertising wild edibles walks, requesting personal referrals from friends and colleagues, and asking produce buyers at restaurants, herb shops and food coops about their wild resource suppliers. Once I gained entry to a particular gatherer sub-group, I asked for further referrals to potential interviewees; i.e., used the snowball, or networking, technique. Snowball technique has been identified as a useful method to gain entry into isolated or criminal populations (Faugier & Sargeant, 1997). I reference this citation not to equate gathering with criminality, but rather to emphasize its hidden or “under the radar” status and the appropriateness of the sampling technique.

I interviewed 24 individuals, 17 males and 7 females, ranging in age from 31 to 84. They included 5 ginseng gatherers, and 19 generalist gatherers of mushrooms, wild greens, medicinals and wild fruits/nuts. None of my interviewees gathered craft materials. I interviewed gatherers from across the state, from Brattleboro in the south to Springfield and Bethel in the east, to the central and northwestern areas of the state including Montpelier, and the Burlington/Champlain Valley area. Notable areas of omission included the southwest of the state, the Northeast Kingdom and the Champlain islands. To protect the confidentiality of my interviewees, I gave each a pseudonym.

Although the sample size was relatively small, I reached theoretical saturation point after 14 interviews. Work by Guest, Bunce, and Johnson (2006) confirms that relatively small sample sizes can produce robust results. Guest et al. (2006) found that out of 60 interviews, data saturation point, defined as the point at which few or no new substantive codes are added to the codebook, was reached after entry and analysis of the twelfth interview.

### **Field methods**

In-depth interviews constituted the primary data collection method. Qualitative interviewing was the most appropriate method to answer my research questions because, as Rubin and Rubin (1995) note, it “allows us to share the world of others to find out what is going on, why people do what they do, and how they understand their worlds” (p. 5). The interviews were semi-structured and guided by a set list of open-ended questions designed to elicit information about gathering practices (see Appendix A).

I conducted interviews with Vermont gatherers between March and September of 2008. I met most interviewees in their homes for face to face interviews, although two of my interviews were conducted in outdoor parks. The value of face-to-face interviews is the ability to personally observe tone of voice, body language, home life and other aspects integral to the understanding of the respondent’s worldview. All of the interviews were taped and transcribed, as were subsequent in-person follow-up interviews. I called two interviewees with further questions; while I did not transcribe these conversations, I took detailed notes. I also emailed a few minor follow-up questions to interviewees in cases where I needed clarifications.

I attempted to make the interviews conversational in tone, leading to the production of narratives that could be analyzed for meaning (Mishler, 1986; Riessman, 1993). The purpose of keeping interviews conversational was to act as a listener and to allow interviewees to discuss

their gathering practices casually and at length. By making my interviews conversational in tone, I intended to elicit “thick descriptions” (Geertz, 1973) of gathering practices. Thick descriptions are necessary to understand the various nuances behind interviewee’s reasons given for gathering. For example, Penny, one of my respondents, spoke of the importance of plant communication, asking plant permission to harvest, and afterwards giving thanks for harvest. This description allowed me to better understand her views of nature (as a force to be communed with), plants (as equal beings), and sustainability (obtaining permission to harvest and showing gratitude).

I began my interviews by introducing myself, explaining the purpose of my research and asking participants to sign a consent form (see Appendix B). Interviews generally lasted from an hour to an hour and a half. I began the interviews by asking gatherers questions about their upbringing and background. Next, I moved to gathering-specific questions, asking respondents to tell me how they got into gathering, where they learned their gathering skills, how long they had gathered, what species they gathered, when they gathered, what gathering techniques they used, and what gathering meant to them (see Appendix A, interview guide).

After the interview, I asked participants if they wished to receive a written transcript of the conversation. In cases where respondents requested a transcript, I subsequently incorporated any supplementary feedback into my data set such as clarifying remarks, additional commentary or re-wording of sections. After coding the interviews, I asked several of the interviewees for follow-up comments on the budding analysis (a method known as member-checking), either in person, or if not possible, by telephone.

In order to draw out exceptional experiences related to gathering, I drew upon questioning techniques used in the life story/life history tradition (Cole & Knowles, 2001;

Labaree, 2006; McAdams 2006) in an effort to obtain rich narratives for analysis. Labaree (2006, p. 123) notes that life history, “gives voice to the experienced life” (p. 123). The life story method is particularly appropriate for answering complex questions about why people engage in certain activities or behaviors as well as for advancing the understanding of complex interactions between individual lives and the social contexts in which they are lived (Cole & Knowles, 2001; Labaree, 2006).

In the life history tradition, interviewers rarely ask questions with the intention of reconstructing an individual’s entire history – rather the focus is placed on specific issues and seminal events (Labaree, 2006). The purpose of life history inquiries is to create an in-depth profile of an individual. Interviewers ask respondents to recount high points or low points of experience in a particular field. In the case of gathering, I asked respondents to recount memorable forays and focus in on the positive or negative aspects of particular outings. I also merged life history questions into classic ethnographic questioning traditions, for example by asking the following “grand tour” (Spadley, 1979) question: “Tell me how you got into gathering?”

I attended various gatherer functions including an herb walk, two wild edibles lectures, and a public, for-fee wild edibles walk followed by a dinner of wild edibles. In addition, I went into the field with one interviewee during ginseng season. I gathered mushrooms with an individual I met after I had completed my interviews (in 2010), and used him as a soundboard for discussing my evolving thoughts on the dissertation. Because this individual was outside of the interview pool (but still knew some of my respondents), I felt that I could use him to “member check” my impressions and emerging themes from the data. I also attended the Vermont fur and

ginseng auction two times during the research and spoke with a number of ginseng gatherers and trappers there.

The purpose of attending such events was to familiarize myself with the gatherers' world. These events allowed me to witness first-hand how gatherers interact with nature and to understand what kinds of knowledge gatherers transmit to each other and to neophytes. I found forays to be an excellent opportunity to casually interact with newcomers to the gathering community and question them about what factors drew them to the subject matter. I also believe that wild settings and interaction with wild plants broke down certain barriers created by the strictures of an interview setting and led to more authentic communication about reasons for gathering. I took extensive field notes about my conversations during these forays and include several quotes from these outings in following chapters.

### **Field Notes**

I took notes on dates, times and settings of interviews for the purpose of aiding memory recall and providing fuller detail for the writing process. These notes were added as appendices to my transcripts. Such notes included reflective observations about interviews such as the general mood (of both interviewee and interviewer), surprising responses, queries about my shock or surprise over aspects of the conversation, doubts, confusions and questions for coding and analysis. Such field notebooks are typical of ethnographic investigations (Spradley, 1979; Hammersley & Atkinson, 1995). I also made use of my digital recorder for dictating thoughts and impressions about the interviews while driving home.

### **Data analysis**

I audio taped and personally transcribed all of the interviews. Although time-intensive, I felt that it was important to go over the tapes myself to ensure proper transcription and to make



notes about the interviewee's (as well as my own) elocutions. Analysis of the interviews began as soon as each interview was transcribed. This iterative process, common in most ethnographies, provided me with a feedback loop to ask more concise questions of interviewees in future meetings (Spradley, 1979).

I first analyzed my interview data using an inductive coding process described by Miles and Huberman (1994). This process involved data reduction (through the use of coding and memo writing), data display (visually mapping coded themes) and conclusion-drawing. I developed codes from reading and re-reading hard copies of my transcripts, highlighting themes in different colors and making notes in the margins. Once I identified similar themes from different transcripts, I entered the electronic versions of the transcripts and, using cut and paste, created new Microsoft Word documents dedicated to singular themes (such as gathering for health). This process provided me with a descriptive analysis of reasons gatherers gave to explain their practices. The codes were rather self-evident in this exercise, falling into categories such as: enjoyment of time in nature, gathering for income, gathering for self-provisioning, or gathering as an enjoyable sensory experience. For the descriptive analysis, I also coded factors that interviewees cited as important either in maintaining or eroding their abilities to gather, for example, free time, access to resources, and land management practices.

For the theoretical analysis of the data, I used thematic analysis (Boyatzis, 1998; Braun & Clarke 2006). Thematic analysis “is a method for identifying, analyzing and reporting patterns (themes) within data (Braun & Clarke, 2006, p. 79).” According to Boyatzis (1998) a theme is “a pattern found in the information that at the minimum describes and organizes possible observations or at the maximum interprets aspects of the phenomenon” (p. vii). Thematic analysis is particularly well-suited to discovering cultural tenets and motivations that shape

individual lives (Lubrosky, 1994). It is also “best suited to elucidating the specific nature of a given group’s conceptualization of the phenomenon under study” (Joffe, 2011, p. 212).

Braun and Clarke (2006) identify six steps for rigorous analysis of data within the thematic analysis tradition. These steps involve: 1) transcribing, reading and taking notes about the data; 2) systematically coding data and matching all relevant data to corresponding codes, 3) coalescing codes into potential themes, 4) assessing the fit between themes and codes as well as between themes and the entire data set to create a thematic ‘map,’ 5) analysis and refinement of themes; and 6) final analysis and report writing.

Braun and Clarke (2006) identify two distinct types of thematic analysis which they title “inductive thematic analysis” and “theoretical thematic analysis.” Inductive thematic analysis relies upon the emergence of themes from the data and is quite similar to grounded theory. In theoretical thematic analysis, the investigator brings a set of theoretical lenses to bear on a particular question and organizes themes in accordance with pre-defined theories. I followed the theoretical thematic analysis format, using central concepts from Bourdieu’s work as coding headings. For example, “financial capital” was one code, and any quotes mentioning gathering as a means to obtain money fell under this heading. “Cultural capital” was a code for any remarks regarding books, art, schooling or certificates of competence, while “social capital” was used as a code for passages discussing an interviewee’s social network (family, friends, and gift exchange of products amongst such people).

After reading the transcripts several times, I observed a split in the ways that gatherers from rural backgrounds differed from gatherers from urban or suburban backgrounds. Because Bourdieu’s concept of habitus was difficult to use as a code on its own (as it is somewhat nebulous and could be open to interpretation from coder to coder), I searched for more concrete

themes that would reflect gatherer's dispositions and values, which lie at the core of habitus. Looking through my memos on the subject, I eventually created the codes "views of nature," and "views of gathered products." In his study of mushroom gatherers, Fine (1998) found differences between gatherers based on their views of nature. My data was showing similar differences between groups based on views of nature, and as Fine had created a precedent in the gathering literature for coding regarding views of nature, I coded accordingly. Fine (1998) created a novel framework to explain differences in views of nature amongst gatherers, namely the concept of "nature work." Unlike Fine, I was using a theoretical framework where I could link such differences in views of nature back to Bourdieu's concept of habitus and practice.

Lastly, I authenticated results by member checking preliminary results with interviewees (Punch, 1998) as well as by soliciting feedback on emerging categories and codes with academics familiar with gathering, i.e., peer review and debriefing (Glesne, 1999). Four readers holding doctorates in natural resources or environmental studies, and three specifically having experience of the gathering literature, read portions or the entirety of my draft dissertation.

### **Authenticity and ethical concerns**

All interviews are socially constructed artifacts emerging from the interaction of the interviewer and interviewee, and analysis of such data can fall into a number of pitfalls (Silverman, 2000; Holstein & Gubrium, 2002). For example, Silverman (2000) warns that coding can become a "difficult to escape grid" and effectively prevent the emergence of new ideas and insights. I relied upon reflective journaling and a careful adherence to the principles of thematic analysis, as laid out by Braun and Clarke (2006), to help me to avoid such pitfalls. I was as forthcoming as possible with interviewees about my aims for the study. As required by Antioch New England University, I completed a Human Subjects Review application prior to my

interviews and asked each interviewee to sign a release form (Appendix B) prior to audio taping conversations.

### **Study limitations**

Studies of hidden populations such as gatherers always raise questions about sampling and representativeness. A number of my interviewees were from the more urban and suburban areas of Vermont and had not been born in the state. I purposefully selected ginseng diggers as a sub-group to study because most of those gatherers were born and raised in Vermont. I had less luck finding native Vermonter gatherers of herbs or basketry materials, and their absence may have skewed my interpretations of gatherer practices. While this study is a useful preliminary look into reasons for gathering amongst contemporary Vermonters, it may not provide a comprehensive portrait. It would be useful to expand the study area to include gatherers from the so-called Northern Forest (encompassing northern New York, Vermont and New Hampshire) to see if similar results are found using the same protocol. Even if results proved to be congruent, the method may uncover differences in gathering practices and reasons for gathering if it were replicated in other regions of the country with different racial make-up, marketing dynamics and cultural history - for example Appalachia, the U.S. Southwest or the Pacific Northwest.

## **Chapter 4: A brief history of human-plant interactions in Vermont, 1600 – present**

Vermont is modestly grand, a softness over old ruggedness, blessed with diversity  
of land and wildlife.

Charles Johnson, *The Nature of Vermont*

### **Introduction**

The forests, fields and waters in the geographic area now known as Vermont have sustained humans for millennia. In this chapter, I briefly examine the history of natural resource use in Vermont, placing a particular emphasis on human-plant interactions. The purpose of this overview is twofold. First, it will serve, generally, as a description of the study area. Second, it will provide the reader with the requisite historical backdrop to contextualize contemporary plant gathering practices in Vermont. I begin by describing Abenaki plant use in Vermont prior to European contact. I next review land changes wrought by European colonists and discuss wild plant use by Euro-American settlers from the 1600s to the present day, chronicling some of the most well-documented and economically important wild plants used in Vermont. In the closing section of the chapter, I examine economic and demographic shifts within the state over the past century. These changes - including population growth, development, a transition from a predominantly agricultural economy to a modern mixed economy, and the influx of urban- and suburban-born newcomers - have, I suggest later in this dissertation, strongly influenced and altered contemporary gathering practices in Vermont. A more detailed analysis of how economic and demographic trends have influenced gathering practices in Vermont will follow in subsequent chapters.

## **Setting**

The State of Vermont is located in the northeastern United States, falling roughly between the forty-second parallel north and the forty-fifth parallel north. The state is landlocked but boasts significant waterfront access to Lake Champlain on its western border. The terrain is variable, from bogs and flat fertile bottomlands along Lake Champlain and various river valleys, to craggy, alpine peaks. Vermont's glaciated soils host the upper reaches of the Appalachian hardwood forest as well as the southern fringes of the boreal forest. The state is currently home to 447 vertebrate animals (Vermont Department of Fish and Wildlife, 2011) and, according to the state's top botanist, 2,100 species of plants, a third of which are considered non-native (R. Pop, personal communication, November 1, 2011). The growing season ranges from 90 to 150 days and average annual precipitation is between 28 and 38 inches (with the highest peaks in the state receiving over 70 inches per annum [Thompson & Sorenson, 2000]). Winters are long and cold; average January temperatures in Vermont's Northeast Kingdom range from 12°F to 14°F while the Champlain Valley averages 18°F to 20°F in January (Thompson & Sorenson, 2000).

### **Abenaki land management and plant use, pre-European contact**

At the time of first contact with European explorers in the early 1600s, Vermont was occupied by three Native American groups: the Mohawk, the Mahicans and the Abenaki. The Abenaki were the most widespread of the three, with an estimated population of 6,000 (Haviland & Power, 1994). The Abenaki lived in semi-permanent villages in lowland areas like the Champlain Valley in western Vermont and the Connecticut River Valley in eastern Vermont. These areas offered mobility of travel by canoe (thereby facilitating trade with nearby tribes), had fertile soils for agriculture, provided access to fish resources, and served as staging areas for hunting parties traveling to the uplands for game. Although the Abenaki cultivated corn, beans

and squash since approximately A.D. 1100, agriculture supplemented, but never supplanted, subsistence hunting and gathering in Vermont (Haviland & Power, 1994).

Lake Champlain, the Connecticut River and other waterways contributed salmon, shad, trout, snapping turtle, beaver, muskrat and waterfowl, to name a few of the major species, to the Abenaki diet. Upland game included deer, moose, bear, porcupine, raccoon, rabbits and other smaller mammals. While fish and game provided the majority of protein to the Abenaki diet, and animal furs the majority of clothing and bedding, wild plants contributed significantly to Abenaki nutrition and healthcare. Plants also yielded dyes and building and craft materials (Haviland & Power, 1994; Wiseman, 2001).

Listed in Table 1 are some of the many wild plants and trees used by the Abenaki. In spring, the Abenaki tapped maple trees with hatchets, collecting maple sap in birch bark containers or clay pots and reducing the sap down to syrup and sugar over an open fire. Women were principally responsible for gathering maple sap and wild plants (Haviland & Power, 1994). Some of the wild greens they likely collected in the spring included ground nuts, the wild leek (Vermont's Winooski River derives its name from the Abenaki word for wild leek [Haviland & Power, 1994]) and fiddlehead ferns (von Aderkas, 1984). Summer foods included pigweed and buckwheat, which could be ground into flour and stored, and berries, which provided important vitamins and could be dried for use in winter (Wiseman, 2001). Fall brought protein-rich nuts that also helped tribes survive through the long, difficult Vermont winters.

Table 1. Wild plants and trees historically used by the Abenaki in Vermont.

Plants			Trees		
Common name	Scientific name	Use (part used)	Common name	Scientific name	Use (part used)
Sweet flag	<i>Acorus calamus</i>	Medicine for colic, colds and cholera (root)	Balsam fir	<i>Abies balsamea</i>	Topical medicine for frostbite, wounds (resin)
Hog peanut	<i>Amphicarpaea bracteata</i>	Food (root)	Alder	<i>Alnus rugosa</i>	Dye (bark)
Spikenard	<i>Aralia racemosa</i>	Treatment for wounds (root)	Yellow birch	<i>Betula alleghaniensis</i>	Tea for diarrhea (bark)
Milkweed	<i>Asclepias</i> sp.	Cordage (stalk fibers)	Paper birch	<i>Betula papyrifera</i>	Canoe hulls & containers (bark)
Pigweed	<i>Chenopodium</i> sp.	Food/flour (seeds)	Hickory	<i>Carya</i> spp.	Food (nut), tools (wood)
Clintonia	<i>Clintonia borealis</i>	Kidney stones (root)	Chestnut	<i>Castanea dentata</i>	Food (nut)
Gold thread	<i>Coptis trifolia</i>	Gum disease (stems)	Beech	<i>Fagus grandifolia</i>	Food (nut), dye (bark)
Hazelnut	<i>Corylus cornuta</i>	Food (nut)	Black Ash	<i>Fraxinus nigra</i>	Baskets & fish traps (wood)
Buckwheat	<i>Eriogonum</i> sp.	Food/flour (seeds)	Butternut	<i>Juglans cinerea</i>	Food (nut), dye (nut husks)
Bedstraw	<i>Galium</i> sp.	Dye (roots)	Black walnut	<i>Juglans nigra</i>	Food (nut), dye (nut husks)
Labrador tea	<i>Ledum groenlandicum</i>	Blood purifier (leaves/twigs)	Spruce	<i>Picea</i> spp.	Cordage (roots)
Gooseberry	<i>Ribes</i> spp.	Food (berry)	White Pine	<i>Pinus strobus</i>	Canoes (trunk), poultices (bark)
Raspberries, Blackberries	<i>Rubus</i> spp.	Food (fruit)	Quaking aspen	<i>Populus tremuloides</i>	Vermifuge (bark)
Elderberry	<i>Sambucus canadensis</i>	Food (berries)	Black cherry	<i>Prunus serotina</i>	Medicine (bark), food (berries)
Bloodroot	<i>Sanguinaria canadensis</i>	Dye (roots), disinfectant (roots)	Oaks	<i>Quercus</i> spp.	Food (acorns)
Bullrush	<i>Scirpus</i> sp.	Weaving (stalks)	Sumac	<i>Rhus typhina</i>	Food (berries), dye (berries, pith)
Goldenrod	<i>Solidago</i> spp.	Dye (stalks and flowers)	Sassafras	<i>Sassafras albidum</i>	Medicine (all parts)
Cattail	<i>Typha</i> sp.	Food/flour (shoots/seeds), weaving (leaves)	Mountain ash	<i>Sorbus americana</i>	Diuretic (bark)
Blueberries	<i>Vaccinium</i> spp.	Food (fruit), medicinal tea (leaves)	Basswood	<i>Tilia americana</i>	Cordage (bast)
Wild rice	<i>Zizania</i> sp.	Food (seeds)	Slippery elm	<i>Ulmus rubra</i>	Cordage (bast)

Sources: Haviland and Power (1994), Wiseman (1995), Wiseman (2001).



Abenaki use of wild plants was ingenious. Pine trees were hollowed out to make dugout canoes. The Abenaki also learned to make lighter canoes with birch bark hulls. Birch bark was also fashioned into containers, while the pounded wood of black ash was cut into strips and woven into baskets and fish traps (Haviland & Power, 1994). Cordage was made from plants like milkweed as well as the bast of trees such as basswood and slippery elm (Haviland & Power, 1994). A variety of trees and plants also provided dyes used for decoration.

Abenaki women gathered many wild plants for use as medicines, but the exact species remain unknown. For example, Haviland and Power (1994) noted:

Native Americans generally made use of a wide variety of plants and herbs for medicinal purposes, more than 200 of which at one time or another were later included in the *Pharmacopeia of the United States* or in the *National Formulary*. All but a handful of drugs made from vegetables native to North America known today were used by native peoples, and the Abenakis were no exception. (p. 166)

Wiseman (2001) discussed Abenaki herbal medicine in an appendix to his book *The Voice of the Dawn*, but all of the plants noted were taken from material published about the Montagnais, Algonquin, Penobscot, Malecite, Micmac and other neighboring tribes. Wiseman (2001) merely noted that the “curing practices” of neighboring tribes were often shared with the Abenaki, thus the plants listed were likely used by the Abenaki for similar medicinal purposes. I was unable to find any literature that discussed past or present use of fungi by the Abenaki for food or medicine.

### **Contemporary Abenaki plant use**

Vermonters of Abenaki origin practiced subsistence hunting and gathering well into the twentieth century, particularly in the Swanton area along the northern reaches of Lake Champlain (Haviland & Power, 1994; Robtoy, Brightstar, Obomsawin, & Moody, 1994; Lampman-Larivee, 2009). Abenaki still hunt, fish, and gather wild plants for food, medicine,

and crafts today, but they are sometimes loath to share information about their cultural practices with outsiders (see Levitt, 2009). Harris (2011) spoke with three Vermont residents of Abenaki heritage and documented continuing use of wild greens (marsh marigolds, wild leeks and fiddleheads), berries, wild rice, game and fish (frog legs, deer, rabbit, squirrel, eels, perch) amongst contemporary tribe members, as well as harvest of unspecified plants for basketry, medicinal and ceremonial purposes.

### **Europeans and the transformation of the land**

When Europeans first arrived in Vermont, it is estimated that the land was 95% forested (Albers, 2000). For much of the 1700s, Vermont was largely unsettled due to its remoteness, forbidding terrain, harsh winters and the ongoing French and Indian Wars. At the close of the conflict in 1763, English settlers began streaming into the state from southern New England. In 1791, 85,539 settlers were living in Vermont; nine years later, the number had swelled to 154,465 (Albers, 2000).

One of the most significant differences between the Abenaki and the European settlers involved their respective notions of subsistence. While the Abenaki were familiar with agriculture, they used crops to supplement a diet principally composed of game, fish and wild plants. The Abenaki lived lightly on the land; Klyza and Trombulak (1999) described their effect on the landscape as “minimal” (p. 34). Conversely, the European settlers imported a subsistence system wherein cultivated crops and domesticated livestock provided the majority of calories and game and wild edibles were supplemental. The settlers’ view of subsistence was antithetical to the Abenaki way of living. To early colonists, Vermont’s forests were not a source of bounty, but a wilderness to be tamed and transformed into a system of “fields and

fences” (Cronon, 1983). This new way of using and valuing the landscape caused profound and irrevocable changes to Vermont’s ecosystems.

The most important plants exploited by early Euro-American Vermont settlers were the seemingly ever-abundant trees. Forests were felled to make room for agricultural land and pasture, for the building of log cabins, and for firewood. Cronon (1983) staggeringly estimated that “a typical New England household” (p. 120) burned as much as thirty or forty cords of firewood annually. The felling of Vermont’s forests occurred in several waves that were tied to specific industries. In the early and mid 1700s, white pine trees in the eastern reaches of the state and within the Champlain Valley were marked and cut for use as masts in the British navy (Meeks, 1986b; Perlin, 1991). Potash, produced from the ashes of burned trees, was one of Vermont’s few export commodities in the early years of its statehood. A large elm tree could yield as many as 40 pounds of potash, at a value of nearly three dollars (Meeks, 1986b). The value of potash drove settlement and concomitant deforestation because new arrivals to the state could earn enough money from its production to pay for the land that had been cleared (Albers, 2000). By 1840, Vermont became the leading producer of potash in New England (Klyza & Trombulak, 1999), with a production level of 718 tons (Meeks, 1986b). Much of the potash was used by textile factories, first abroad (predominantly in England), and later, domestically.

By the mid 1700s, ironworks were established in Vermont to feed growing domestic and foreign demand. These relatively primitive ironworks required huge amounts of fuelwood for firing – as much as 250 to 300 bushels of charcoal to produce one ton of ore (Cronon, 1983; Rolando, 1992). Cronon (1983) estimated that 768 cubic feet of wood were in turn burned to make the requisite 250 bushels of charcoal. Rolando (1992) found evidence of 99 ironworks, 71 charcoal producing sites and 118 lime kilns across Vermont, for a total of 288 intensive, wood-

using industries in the state. Considering that there are only 251 towns in Vermont today, this suggests a wide-scale burning of wood across much of the state during the early nineteenth century.

The merino sheep farming craze of the 1830s and 1840s drove further deforestation as new pasturelands were created. Newly arrived railroads required wood for railway bed sleepers as well as tens of thousands of cords per annum for locomotive fuel (Meeks, 1986b). The harvesting of Vermont's trees for the timber trade also continued apace during the 1800s, lofting Burlington to third on the list of the nation's leading lumber ports (Albers, 2000).

The wholesale destruction of Vermont's forests changed species composition, caused erratic fluctuations in temperature and weather, and increased erosion, which was further exacerbated by soil compaction from grazing livestock (Cronon, 1983; Albers, 2000). The Abenaki were decimated by conflict, disease and the destruction of subsistence resources and survivors took refuge in the swamps of northern Lake Champlain or fled to Canada. Non-native flora from Europe spread throughout the state, often out-competing native vegetation. Hunting, a booming fur trade, habitat destruction and bounties for carnivores dangerous to livestock resulted in the extinction of the passenger pigeon, the extirpation of wolves and catamounts, and significant reductions in numbers of bear, fox, beaver, turkey and other mammalian and avian populations. Deer were so depleted that a hunting ban was put in place in 1865. Vermont's deer hunting season was only reinstated 32 years later after a successful re-stocking of the herd with deer from New York populations (Albers, 2000).

By the mid-to-late nineteenth century, sixty or seventy percent of Vermont's forests was cleared (Klyza & Trombulak, 1999; Vermont Agency of Natural Resources, 2003). Many Vermont hill farms, which had relatively poor agricultural soils to begin with, barely provided a

subsistence living. The denuded Vermont landscape lost much of its luster to younger generations. Historian Lewis Stilwell bemoaned Vermonters' utilitarian use of the land: "The people had mined the state rather than cultivated it" (quoted in Klyza & Trombulak, 1999, p. 76). "The Green Mountains of Vermont, in short," echoed state naturalist Charles Johnson (1980), "had become a biological wasteland, offering little for people to live upon – a dramatic change from the bounty of a century earlier" (p. 44). As Albers (2000) concurred, "exportation of nature's bounty does not make for an endlessly productive economy" (p. 171). Factory job openings in southern New England and the availability of new land west of the Mississippi spurred an exodus of Vermonters. Population levels in the state flat-lined. According to the US Census, decennial growth in Vermont's population was less than one percent between 1850 and 1860, between 1870 and 1880, and between 1880 and 1890.

### **Euro-American settler plant use, 1700s-1800s**

Historical records of wild plant use by Euro-American settlers in Vermont are fragmentary. Many uses of the New World's plants were learned from Native Americans. Other wild plant use traditions, such as homeopathic use of herbs, were imported from Europe. Below, I present accounts of how Euro-American settlers used native trees, shrubs and herbs. I also introduce evidence that suggests widespread use of wild plants in herbal and folk medicines in Vermont. Lastly, I profile the nineteenth century patented medicine industry in Vermont, which used, or purportedly used, a number of wild, native plants. While this salmagundi of historical accounts of wild plant use is far from authoritative, I believe it demonstrates pervasive familiarity with, and use of, wild plants by early Vermont settlers.

### **Use of trees.**

Certainly the most well-known wild plant resource in Vermont is maple sugar and maple syrup, made from the sap of maple trees (*Acer* spp.). Early settlers learned how to make maple sugar from the Abenaki (Lawrence & Martin, 1993; Koelling & Heiligmann, 1996). Vermonters embraced sugaring because of the scarcity and expense of white cane sugar, which during the early years of statehood was considered a luxury item (Crockett, 1941). Maple was also a local resource that provided a measure of self-sufficiency for rural households (Vermont Maple Sugar Makers' Association, 1894). According to Albers (2000), maple income was critical to rural livelihoods: "It kept many hill farmers from going under in the latter part of the nineteenth century" (p. 210). Thompson (1972 [1853]) reported that Vermont produced 4,647,934 pounds of maple sugar in 1840. So central was maple syrup production to daily farm life in Vermont that towns such as Waitsfield closed school for a up to a month in springtime, a tradition that lasted well into the early 1900s so as to allow school children free time to help their families or their neighbors with sugaring work (Strickland, 1986).

In addition to maple sugaring, colonists adopted other uses of local trees from the Abenaki. Zadoch Thompson's *Natural History of Vermont* (1972 [1853]) reported that the inner bark of basswood was "macerated in water and formed in ropes" (p. 209). Other Abenaki uses of trees (Table 1) that were adopted by colonists and persisted into the 1800s included the use of black cherry bark as a medicine and tonic, the production of baskets and chair bottoms from the pounded wood of black ash, the collection, drying and eating of chestnuts and butternuts ("esteemed a luxury by many"), and the use of sassafras as a medicinal (Thompson 1972 [1853]).

### **Berries.**

In addition to the uses and medicinal properties of trees, Thompson (1972 [1853]) described the “considerable variety of berries” (both wild and cultivated) used in the state, including currants, whortleberries (*Vaccinium* spp.), raspberries, blackberries, cranberries and wild grapes. The berries were collected and consumed by households but also sold for income: “In plentiful years, the quantities of these berries (whortleberries) offered for sale in our villages along the western part of the state are very considerable (Thompson 1972 [1853], p. 220).” Thompson (1972 [1853]) reported that the village of Burlington alone produced 200 bushels of whortleberries in the summer of 1841. While Thompson listed the edible, medicinal and material uses of over three dozen trees, unfortunately for history’s sake, he failed to list the uses of wild herbs: “We had intended in this place to notice a few of the many herbs and roots which are, or have been, of repute for their medicinal virtues, but we have not room (Thompson, 1972 [1853], p. 221).”

### **Herbal and folk medicine.**

Undoubtedly many wild herbs and roots were used as medicines in Vermont by individuals who drew from both European and Native American healing traditions. Unfortunately, many uses of plants were not recorded for posterity. Writing on the subject of folk medicine, Vermont historian Jane Beck (1990) stated, “Folk medicine was passed on orally and by example within families, and very little remains in the way of documentation on the subject” (p. 34). Anecdotal evidence suggests that herbal medicine was common in the Green Mountain State. Samuel Stearns’s *The American Herbal or Materia Medica* (Stearns, 1801) listed the uses of, and preparations for, scores of wild plants. The number of subscribers in

Vermont surpassed 400, nearly equal to the number of recipients in New Hampshire and Massachusetts combined (Stearns, 1801).

Zadock Thompson maintained a list of physicians in his annual gazette, *Walton's Vermont Register*. Categories of doctors using herbs included “Indian,” “botanical and root,” “Thomsonian” (after Samuel Thomson), and “homeopathic.” Numbers of these physicians never exceeded more than a few single digit percentages of overall doctors in the state in the early 1800s, although numbers of homeopathic physicians climbed above ten percent of state physicians in 1885 (McPartland & Pruitt, 1998). McPartland and Pruitt (1998) reported that Indian doctors and botanical and root doctors likely learned much of their craft from the Abenaki. This is also true of Thomsonian medicine, which appropriated knowledge of medicinal herbs from eastern tribes and used them in combination with other Native healing practices such as sweat lodges (Weinstock, 1988).

Thomson used dozens of wild plants in his practice, his favorite being *Lobelia inflata* (see Thomson, 1849), a remedy used by a number of Native American tribes. Thomson practiced medicine in New Hampshire but had loyal followers in Vermont. By the late 1830s, the doctor claimed to have three million adherents nationwide (Weinstock, 1988), but his system of medicine waned after his death in 1843. Thomson was not the only regional practitioner of herbal medicine with influence in Vermont. A doctor by the name of Elijah Hewes, of Glastenbury, VT, published a pamphlet (costing three dollars) titled *Female Nurse* in 1833. In the treatise, Hewes recommended numerous herbs for various ailments and complaints and discussed how to create tonics and poultices with ghastly admixtures such as chimney soot, hog lard, chicken dung, and, in one cure for billious cholic (sic), “urine of the beast, if you can get it



(Hewes, 1833, p. 37).” Many of the cures took a laundry-list approach to herbal medicine. For a patient with a severe cold, he reported:

I made her a bitter syrup of mugwort, motherwort, mother thyme, may-weed, earthsmart, camomile, tanzy, wormwood, roman wormwood, catnip, penny-royal, feather few, or rue, marjorum, oak Jerusalem, hoar-hound, or squaw weed, hemlock boughs, thorough-wort, blue or purple vervine, onions, leeks, or garlicks, any or all of the above named articles are good to sweat with (Hewes, 1833, p. 25).

In 1876, the Vermont legislature established a medical licensing board. The board refused to grant recognition to physicians trained through apprenticeships. This ruling led to a sharp decline in what McPartland and Pruitt (1998) termed “sectarian” types of physicians who practiced herbal medicine.

In reality, much of the folk medicine in Vermont was not practiced by physicians but rather by midwives. Midwifery persisted in Vermont well into the twentieth century because transportation was difficult, and because doctors were few and far between, and often costly (Beck, 1990). Midwives knew the uses of many wild plants, such as prescribing slippery elm (*Ulmus rubra*) bark for easing sore throats. They often used plants based on a doctrine of signatures or what Beck (1990) termed a system of “sympathetic magic,” e.g., using bloodroot (*Sanguinaria canadensis*) to treat bleeding. According to Beck (1990), plant lore was passed from generation to generation and the gathering and drying of medicinal plants was common. Every town possessed one or more individuals, usually women, versed in plant knowledge. “Almost every neighborhood had such a knowledgeable individual and in many instances the country doctors depended on these people” (Beck, 1990, p.38). Many of the early midwives were of Native American descent and used remedies such as mint teas (Beck, 1990). Such remedies have since become widely viewed as Yankee “simples.” Several of my interviewees mentioned using simples for health care when they were growing up in Vermont as children,

particularly mint or chamomile teas for stomach complaints. Similarly, one of Strickland's (1986) interviewees recalled:

My mother's father was an old-fashioned botanist who knew all of the local plants' medicinal properties. I remember going along the hedgerows here with him as he told me what the different ones were good for. Oh, they used to gather catnip and smartweed and spearmint. If you were coming down with a cold, you'd make a bowl of catnip tea and go to bed. Spearmint I think was for fevers. (p. 134)

Another popular folk medicine primer in Vermont was Dr. Jarvis's *Folk Medicine* (Jarvis, 1958), which extolled the virtues of apple cider vinegar as a tonic. One of my interviewees told me that during his childhood, most farms produced their own apple cider and apple vinegar from special varieties of wild and tended apples. The interviewee related that his father was a firm believer in Jarvis's treatments and used cider vinegar mixed with honey to treat a variety of ailments.

### **Patent medicines.**

Over one hundred different patent medicines, concoctions of "roots, herbs, water, alcohol and even opiates" (Fritschel, 2003, p. 42), were produced in Vermont during the 1800s. Many of the nostrums contained, or claimed to contain, wild plants. The medicines often incorporated Vermont into their names as a selling point. For example: M.K. Paine's Celebrated Green Mountain Balm of Gilead and Cedar Plaster, Smith's Green Mountain Renovator, and J.M. Henry & Sons Vermont Liniment. Medicine bottles from the era provide a clue to some of the wild plants used - Henry's Arnica Tincture, Thorn's Hop & Burdock Tonic, Gilbert's Sarsaparilla Bitters, C.C. Doty & Company's Mandrake Bitters and Doty's Cough Balsam. The Wells, Richardson & Company of Burlington became one of the largest patent medicine producers in the state, supplying druggists in New England and northern New York. The company's success is illustrated by an advertising budget which grew over a period of 25 years

(1874-1899) from an initial sum of \$4,000 to over half a million dollars per annum (Fritschel, 2003). “Somehow, the little state of Vermont, with its agricultural economy and rural lifestyle,” noted Fritschel (2003), “managed to capture more than its fair share of the patent medicine industry” (p. 48).

### **Vermont in transition, mid-1800s to present day**

#### **Rural farm life in Vermont – toil, self-sufficiency & communal support.**

In 1840, nearly 80% of Vermont’s population lived on subsistence farms (Klyza & Trombulak, 1999; Albers, 2000). Vermont farm life was characterized by incessant labor. Sugaring, tending to animals, hauling muck, haying, cutting wood, mending fences, barns and homes, plowing, planting crops, harvesting crops, canning the harvest for winter, and helping neighbors erect barns or repair roads were but some of the regular, labor-intensive tasks of the average Vermonter (Morrissey, 1981; Cooley, 1985; Bonfield & Morrison, 1995; Vermont Public Television, 2000). Many households had little money and relied on self-sufficiency and barter (Bonfield & Morrison, 1995). Bees, a social safety net of communal support begun during the early settlement years of the state, lived on as a local tradition, creating and strengthening communal bonds. In the late 1800s, Robinson (1892) reported:

The old custom of making “bees,” instituted when neighborly help was a necessity, was continued when it was no longer needed, for the sake of the merry-makings which such gatherings afforded. There were yet logging-bees for the piling of logs in a clearing, and raising bees when a new house or barn was put up; drawing bees when one was to be moved to a new site, with all of the ox-teams of half a township; and bees when a sick or short-handed neighbor’s season-related crops needed harvesting. (p. 294)

Bees and other types of non-market approaches to livelihood, such as bartering, persisted well into the twentieth century in Vermont. As a youngster in early 1900s, Vermont beekeeper K.E. Mayo recalled that his parents lived off of the land and bartered with neighbors; trips to the

store were rare and often the family would make do without a particular good (Strickland, 1986). For subsistence farms, activities such as sugaring, berry picking, gardening, food canning, cider making and the gathering of spring greens fit within the rhythms of nineteenth and early twentieth century farm life, providing sustenance as well as goods to barter or sell.

### **Decline of sheep farming and the rise of dairying.**

When the sheep boom ended in the mid-nineteenth century, Vermont farmers transitioned to dairying, which, along with maple sugaring, would evolve into one of Vermont's iconic industries. By the mid-1800s, Vermont was producing 4% of the nation's butter and 8% of the nation's cheese, the single greatest per capita producer of either product in the US (Klyza & Trombulak, 1999). By 1899, Vermont led the nation in the production of butter. Its creameries produced 22 million pounds of butter and an additional 18 million pounds were produced at home (Klyza & Trombulak, 1999). Vermont soon lost its competitive edge in cheese and butter production to larger dairies in the Midwest, but because of its proximity to Boston and New York via rail, Vermont was able to corner a lucrative piece of the emerging fresh milk market (Klyza & Trombulak, 1999).

In 1920, the number of cows in Vermont surpassed the human population and the superior ratio of bovines-to-humans persisted until 1963 (Morrissey, 1981). By 1930, more Vermonters, as a percentage, depended upon dairying as a source of income than any other state in the country (Morrissey, 1981; Klyza & Trombulak, 1999). Vermont dairyman Carl Lawrence (in Strickland, 1986) recalled: "When I was twelve, fourteen years old (circa 1915 or so) there were about thirty or thirty-five farmers who peddled milk in the town of St. Johnsbury. Now there isn't one" (p. 80).

### **The decline of farming in Vermont.**

The transition to dairying made Vermont farms more specialized. The size of dairy farms grew, while smaller subsistence farms disappeared. Improved road and rail transportation opened up new business opportunities for individual Vermonters and Vermont businesses. At its high-water mark in 1880, there were 35,000 farms in Vermont. Sixty years later, that number had fallen to 24,000 (Klyza & Trombulak, 1999). The percentage of Vermont citizens classified as “rural” by the US census also fell; in 1840, the entire state’s population was designated “rural,” but a century later, only 65% of the population was considered “rural,” and only 29% of the population was reported to be living on a farm (Rebek, 1982). Subsistence farming continued, but was greatly diminished. By 1930, only six percent of Vermont farms were classified as subsistence or “self-sufficient” farms (Klyza & Trombulak, 1999).

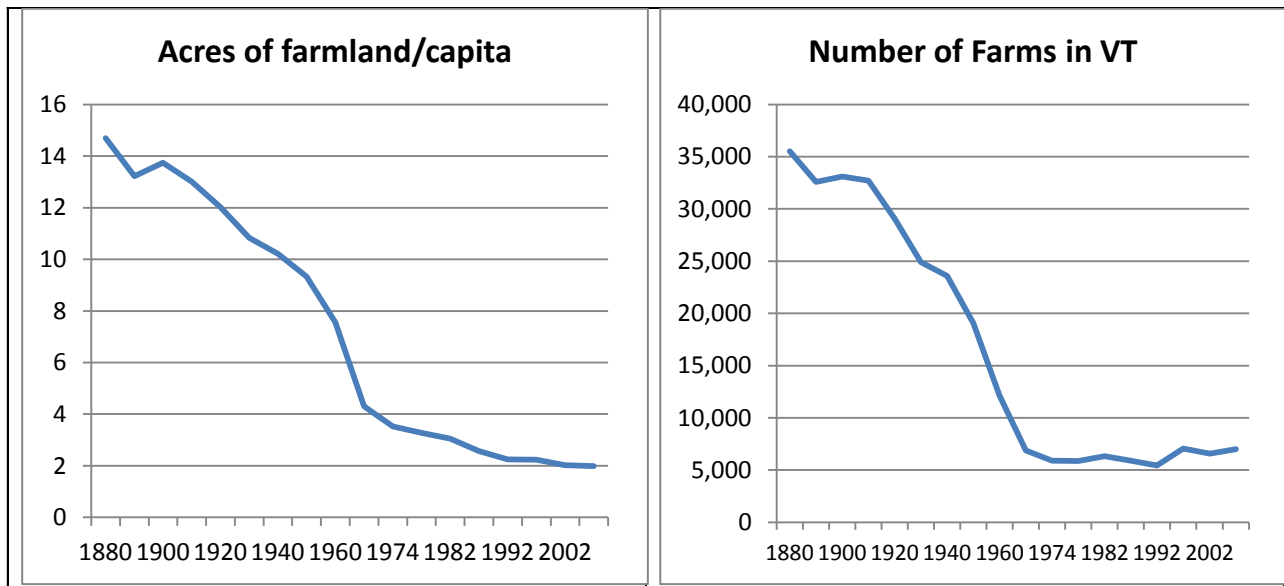
Yet Vermont subsistence farms were able to weather the Great Depression. As Crosier (1999) recounted:

Vegetables came from the garden, not the store... Ma canned these vegetables along with wild fruits. She would take us on berry-picking expeditions in the buggy during July and August and on apple expeditions in autumn... We were never hungry, yet the only time we had store-bought fruit was when we found oranges in our stockings at Christmas, and when an uncle brought us bananas. (p. 61)

Albers (2000) reports that a common joke in Vermont during the 1930s pitted a visitor asking a native-born Vermonter, “Don’t you people know there’s a Depression on?” To which the response was, “Looks the same to me” (p. 254) Albers (2000) further noted that Depression era photographers such as Arthur Rothstein, Jack Delano and Marion Post Wolcott strove to portray Vermont as an impoverished backwater. Their images stood in stark contrast to photos published by Vermont’s tourism board, which typically depicted the state as an idyllic, verdant vacation destination for New Yorkers and Bostonians.

The number of farms in Vermont declined steadily through the 1900s. Figure 2 shows the decline of Vermont farmland from 1880 to 2007, as well as the decline in farmland acreage per capita. Losses of farmland in more desirable real estate areas across Vermont, such as Chittenden County, were exacerbated by development pressures. Between 1950 and 1992, farmland in Chittenden County fell from 72.6% to 24% (Albers, 2000). Vermont farmland currently accounts for only about 20% of all land use in the state, compared with 60% a century ago.

Figure 2: Decline in acres of farmland and number of farms in Vermont, 1880- 2007



*Source:* Center for Rural Studies, University of Vermont.

Small scale farms found it difficult to compete with larger local farms as well as farms outside of Vermont. During the early years of the 20<sup>th</sup> century, Vermont remained an economic backwater with little state support for infrastructure. For example, in 1930, only 13 % of all Vermont farms were electrified compared to 45% of farms in both neighboring New Hampshire and nearby Maine (Meeks, 1986b). One of my interviewees grew up on a farm that was not

electrified until the 1950s. The towns of Victory and Granby did not receive electricity until 1963 (Van Susteren, 1999).

As Vermonters abandoned farms to pursue less arduous and more lucrative jobs, the forest returned. By the late 1890s, Vermont re-opened its deer season after more than a three decade hiatus. Modern deer hunting in Vermont, while only a little over a century old, soon attained a mythic status as a traditional fall rite (see, for example, Miller, 1992, for an exploration of the iconography of deer hunting in Vermont through photos and essays). Today, Vermont is 78% forested (Vermont Agency of Natural Resources, 2003), a reverse-image of its denuded state a century and a half ago.

### **Use of wild plants in Vermont, early 1900s to present**

Present day Vermont residents, particularly its rural denizens, use a variety of wild plants and mushrooms for food, health care, and income. The re-growth of the state's forests has only enhanced gathering opportunities in the state. Most of the wild plants and fungi harvested provide only supplemental sources of food or income to residents. Commercial products include maple syrup, and a few wild plants such as ginseng, fiddlehead ferns, and ornamental ferns. Below, I profile some of the most commonly used plants in present day Vermont and briefly discuss their trade and/or importance.

#### **Wild greens.**

Edible greens, particularly spring greens, were commonly collected and eaten by rural Vermonters. Vermont author Ron Rood (1962) described hunting for edible greens with his family as a child in his chapter entitled, "*Mess o' Greens.*" Plants his family ate included dandelion, curly dock, pokeweed, milkweed, cowslips (marsh marigolds), nettles, fiddlehead ferns, bracken ferns, watercress, chicory, wild rice, lamb's quarters, and purslane. Guildhall,

Vermont postmistress Agnes Deering recalled that her grandmother fed potatoes and wild greens to vagrant train hobos during the Great Depression (Strickland, 1986). Stated Deering (in Strickland, 1986):

Grammy got me into everything edible, anything we could eat. Apples or plants – we’d always go out and get em. And we’d dig dandelions. Of course, we had feeds, and dandelions last quite awhile. We’d run over to the old company store and get a piece of salt pork to cook with em... We’d eat anything else we could find that was edible. We used to pick cowslip greens. They have a beautiful yellow flower and grow in the swamps. (p. 33)

In addition to edible greens, Deering’s grandmother also passed on knowledge of how to use greens as medicine, for example, dandelion cough syrup and muster plasters.

### **Berries.**

Berry collecting was a common activity on Vermont farms (see Cooley, 1986). Alice Bushnell, a farm girl living in Stafford, Vermont, mentioned berry picking several times in her diary from 1911 (Bushnell, 1998). Wild strawberries, raspberries and blackberries were picked and made into short cake or pies, or canned for winter use. Alice’s entry for Tuesday August 24, 1911 simply states: “Papa and Mama and Marshall and I went blackberrying in the afternoon” (Bushnell, 1998, p. 85). One of my interviewees, Eric, recounted the importance of berrying on his grandparent’s farm:

In my family... berries occupied my grandparents to distraction. They would spend hundreds of hours wildcrafting blackberries and raspberries all summer. Making jams and jellies. I had an aunt who, she’s 99 now, and, we used to say of her, if there weren’t no berries, she would come up with 5 gallons of them. She just would just go into the woods and somehow, she would find them.

While wild berries were usually consumed on farm, sometimes they were sold for income. As a child, Agnes Deering of Guildhall, Vermont collected and sold raspberries and blackberries in order to earn enough money to go to the annual fair in Lancaster, New Hampshire (Strickland, 1986).



### **Basketry.**

Basketry is not as widespread in Vermont as in other areas of the US, but a few individuals earned extra income from the craft over the years. Abenaki-descendant John Sweetser patched together a living by hunting, fishing, trapping, logging, tenant farming and other odd jobs, including basketry. Basketry served as a fallback skill in times of hardship, as Sweetser reported to interviewer Hubbard (Hubbard, 2004):

I could make a living in the worst of times when people couldn't get a job. I would go into the forests with an axe and my jackknife to make baskets to sell. It was always comforting to know that I could make a living using simple tools as my people always had. (p. 15)

Family-taught skills such as gathering and basketry allowed a few Vermonters to subsist largely outside of the formal marketplace. As Hubbard (2004) commented: "The Sweetser's were in some ways 'invisible Vermonters,' families and individuals often living hand to mouth from the scant rewards of piecemeal work" (p. 15).

### **Maple syrup.**

There is no other wild product more closely associated with Vermont than maple syrup. Over the years, it has become one of the most iconic state specialties. Today, sugaring is done on an industrial scale by many of state's the largest producers; however, many small scale operations still exist. Sugaring income remains important to a number of present day Vermont dairy farmers because it diversifies income and provides a cushion in times of economic flux (Hinrichs, 1998). As one farmer stated in Hinrichs' (1998) study, "Sugaring gives us extra income. It takes the two – the cows and the sugar. If you depend too much on one or the other, you'll really feel any big price cuts when they happen" (p. 517). Everett Palmer, a resident of Waitsfield, Vermont, remembered the pervasiveness of sugarhouses as a child (in Strickland, 1986).

Every farmer around here used to sugar. It was an extra income to em. Every farm had a sugar house with six, seven hundred, or a thousand trees they'd tap. There used to be sixteen or seventeen sugar houses in the area. Four or five on that ridge when it was all open pasture years ago. (p. 118)

Today, Vermont remains the leading producer of maple syrup in the United States. Approximately 2000 Vermont sugarmakers produce about one half million gallons of maple syrup per year. The total value of the industry is estimated to be worth more than 50 million dollars annually (Morselli, 2003).

Even during the many waves of deforestation that beset the state, farmers would often spare maple trees from the axe. Over the years, maples were slowly incorporated into the very warp and weft of the Vermont landscape and the seasonal rhythms of its inhabitants' rural livelihoods. This cultural landscape is still in evidence today in many a Vermont hamlet where stately ancient maples, called "sap cows" in the local vernacular, can be seen gracing farm dooryards and lining sleepy country lanes.

### **The edible fern trade.**

The curled crosiers of the ostrich fern (*Matteuccia struthiopteris*) were used by Native Americans and early Vermont settlers as spring greens (von Aderkas, 1984). For years, Vermonters collected the fern along the banks of the state's numerous waterways for personal consumption, sometimes canning or freezing excess amounts for later use (Lebentritt, 1974). Apparently a small commercial market for the fern developed sometime in the middle of the twentieth century, perhaps earlier. During the 1970s, an agent from the W.S. Wells Company in Maine drove to Vermont each spring to obtain a supply of greens for the canning company. The agent paid pickers ten cents per pound for the ferns (Lebentritt, 1974). Hard working fiddlehead pickers could make up to \$200 during the short fern season (Lebentritt, 1974). A number of

Vermonters eagerly joined in the picking of the green for supplemental income. Marion LaJoie, an octogenarian native of Richmond, VT, recalled that several local neighborhood boys would harvest enough greens each spring to pay their way to Boy Scout summer camp (personal communication, May 5, 2005).

I moved to Vermont in the early 1990s. At that time, a different agent of the Wells Company was buying fiddlehead ferns. He paid harvesters fifty to sixty cents a pound for the crosiers. Harvesters who sold directly to restaurants and supermarkets made even more money, as I did in 1993, when I received two dollars or more a pound for the ferns. The W.S. Wells Company produced 12 to 15 tons of canned fiddleheads per year in the 1990s under the Belle of Maine brand name, and Vermont provided about a third of the supply (von Aderkas, 1984; Pierce, 2002b). In recent years I have noted fiddleheads ferns for sale at a variety of local supermarkets and food coops with prices ranging from four to seven dollars per pound (Pierce, personal observation).

#### **The ornamental fern trade.**

From the early days of the twentieth century up until the 1960s, Vermont supplied large amounts of wild ferns to the domestic floral industry (Rugg, 1913; Lee, 1938; Newman, 2003). The ferns, harvested by the hundreds of millions (Anonymous, 1914; Robertson, 1915; Lee, 1938), included *Polystichum acrostichoides*, *Dryopteris intermedia*, *Dryopteris goldiana* and *Lycopodium* sp. They were shipped as far as Boston, New York, Washington D.C., Chicago and Denver for use in funeral wreaths, floral displays and as holiday decorations (Rugg, 1913; Winslow, 1916; Tucker, 1919; Lee, 1938). The ornamental fern harvest season ran for several months each fall, providing Vermonters from the southern and middle sections of the state with an infusion of supplemental income.

Robertson (1915) reported that adroit pickers, picking between 10,000 and 12,000 ferns per day, earned a daily wage of between four and five dollars. Tucker (1919) reported that one family earned five hundred dollars during the ornamental fern harvesting season, a considerable sum for the time. In 1938, Lee (1938) reported the following for one fern picker named Nap Drinkwine in the Warren, Vermont area - "For three months of the year, he supports his wife and two children adequately on an income of from \$5 to \$7 a day picking ferns" (p. 38). How Drinkwine supported his family during the rest of the year remains a mystery, but it may be inferred that he cobbled together a living from a variety of seasonal jobs. Newman (2003) interviewed a French World War II bride who gathered ferns in Vermont in the 1950s and 1960s. Newman (2003) reported that the gatherer, Mary Girard, "found that gathering ferns fit well with her limited English language skills, responsibilities as a parent, and need to increase the family's annual income" (p. 38).

### **Wild ginseng.**

Wild American ginseng (*Panax quinquefolius*) has been harvested in Vermont for generations. The major market for the medicinal root is Asia, principally Hong Kong (Carlson, 1986), where the root is revered as a medicinal. The root was listed as a species of concern under Appendix II of the Convention on International Trade in Endangered Species of Fauna and Flora (CITES) in 1975. Prior to its listing, little data was collected on ginseng harvest in Vermont. According to Zadock Thompson (1972 [1853]), ginseng was once widespread in Vermont, but quickly became depleted:

Upon the settlement of this state the ginseng was found to grow here in great plenty and perfection, and it soon began to be sought with eagerness for exportation. For many years it was purchased at nearly all the retail stores in the state, and was sent to the seaports to be shipped to China. Those who dug the root sold it in its crude state for about 2 shillings or 34 cents per pound, and it was so plentiful in some places that digging it was a profitable business.... It has never

ranked very high as a medicine in this country, and its exportation and the clearing of the country has rendered it scarce. (p. 221)

In 1984, a fee-free licensing program was instituted for Vermont ginseng diggers.

Between the 1980s and the year 2012, the number of licensed ginseng diggers who reported harvests fell from 139 to 57; harvests also declined from more than 400 pounds (dried root) a year in the early 1990s to a low of 27 pounds in 2005. According to the state's ginseng coordinator, the 2012 harvest was 179 pounds (S. Pfister, personal communication, September 27, 2013).

It is unclear what caused the decline in Vermont ginseng harvest; possible reasons include death of traditional harvesters, over-harvest of the resource, and conversion or logging of forest land. When I asked one of my interviewees, Paul, what he thought the reason for the decline was, he stated, "Well, a lot of the old-timers who used to do it, they've died." Another reason for smaller ginseng harvests in the state may be related to price. Prices for ginseng have varied wildly over the years, ranging from 7 cents per pound in 1717 (Person, 1994) to more than \$600 per pound during boom years in the 1990s, a factor that likely drew in unscrupulous gatherers when prices were high or economic conditions worsened (see Bailey 1999, who found a positive correlation between unemployment and ginseng harvesting peaks in West Virginia). Most Vermont ginseng diggers collect the root for supplementary income. Only one person was identified by other diggers at the Vermont ginseng auction as someone who relied upon the root for a majority of his income each year.

### **Cedar leaf oil.**

Cedar leaf oil, distilled from the foliage of the northern white cedar (*Thuja occidentalis*), was commonly produced in northern Vermont in the early-to-mid-1900s and, according to one source, oil mills were once more common than sawmills in the region (Howard, 2000). The oil

was primarily produced by farmers or farm hands from brush collected during the clearing of pastures. The brush was boiled down in large, handmade stills. Producers sold their oil directly to merchants in east coast cities or sold to country stores that accumulated lots for shipment or pick-up by traveling buyers (Whitcomb & Whitcomb, 1978). The oil was used medicinally (Guenther, 1973) and was also an ingredient in perfumes, embalming fluids, microscope slide slips, household cleaners, insecticides, liniments, varnishes, and perhaps most famously, as a scented and warming agent in Vick's Vap-O-Rub (Whitcomb & Whitcomb, 1978; Proulx, 1980; Howard, 2000; Hubbard, 2004). Much like top notch perfumers, professional "noses" in the essential oil industry in New York could supposedly detect differences between oils and were able to identify certain batches to individual producers (Whitcomb & Whitcomb, 1978).

Struggling freelance writer Annie Proulx, now a well known author, reported that Orleans County, Vermont was once home to more than 300 cedar oil stills (Proulx, 1980). During World War II, cedar leaf oil was used as a replacement for oil of lavender flowers, an essence used in tincture of green soap and soap liniment for hospitals (Northeastern Wood Utilization Council, 1946). The substitution effect resulted in an increase in price for cedar leaf oil from \$1.14 per pound, paid pre-war, to \$2.50-2.75 per pound post-war (Bailey, 1948). Howard (2000) reported that producers received \$2.25 per pound for their product in 1954. By 1969, the price had risen to \$8.50 per pound (Hubbard, 2004) and ten years later it climbed to \$9.50 per pound (Whitcomb & Whitcomb, 1978). One of the few remaining cedar oil producers in Vermont claimed he earned \$20.00 per pound in 2007 (Herbert, 2007).

Proulx (1980) claimed that a cedar leaf oil producer in Brownington, VT earned about \$6,000 from his business in 1979, in what she described as "a marginal way of making a living... [in] ..an economically depressed section [Vermont's Northeast Kingdom] where jobs are scarce

and pay is poor” (p. 77). Today, few Vermonters produce cedar leaf oil due to low buying prices, high labor inputs, substitution effect by artificially synthesized scents, competition from internationally-produced oils, and limited buyer interest (see Sievers, 1958, for an early harbinger of the industry’s demise, as well as Howard, 2000). While Proulx’s (1980) interviewee apparently relied upon cedar as his primary income, most producers use it as a supplementary income source. According to Herbert (2007), present day cedar oil maker John Gile’s income is derived from a patchwork of seasonal jobs:

To put together a living, he cuts wood in winter, sugars in the spring, mows five local cemeteries in the summer and fall, hand digs graves and collects boughs for holidays wreaths. He can distill cedar oil from the time the maple sap runs until the first hard frost, but for him it’s mainly summer work. (p. 50)

### **Changes in the Vermont economy**

Over the past century, Vermont’s economy has evolved from a natural-resource-based-economy, dominated by agriculture, quarrying, and forestry, to a modern, mixed economy. In 1880, the state’s largest employer was the Vermont Marble Company; over one hundred years later in 1989, the largest employer was the IBM Corporation (Hand, 2003). Vermont has very few manufacturing facilities. There are only nine companies in the state which employ more than 1,000 workers (two of which, IBM and Fletcher Allen Health Care, account for 4% of all jobs in the state), while the majority of companies have less than 10 workers (Bolduc & Kessel, 2008). Of the fifty United States, Vermont’s economy ranks last with a gross state product of \$24.5 billion in 2007 (Bolduc & Kessel, 2008).

Historically, wages in Vermont have trailed the national average. Vermont’s per capita income in 1950 was only about 75% of the national figure (Bolduc & Kessel, 2008). Pockets of severe poverty persisted in many corners of the state well into the second half of the twentieth century. By the year 2000, Vermont’s per capita income rose to \$26,901, ranking the state 32<sup>nd</sup>

in the nation (Severance, 2003) and it has continued to slowly rise since. However, there is a widening income gap within the state, with average incomes of residents living in more populous areas such as Chittenden County (where the state's largest city, Burlington, is located) greatly outstripping the earnings of rural residents in more sparsely populated areas such as the Northeast Kingdom (Severance, 2003; Bolduc & Kessel 2008). Job creation is likewise skewed toward the metropolises, with the Burlington-South Burlington labor market accounting for over half of all new jobs in the state in the past three decades (Bolduc & Kessel, 2008). The median age of Vermont's work force is 42.3, the highest in the nation (Associated Press, 2008). With a birthrate of 42.2 babies per 1,000 women of childbearing age in 2006, Vermont has the second lowest birth rate in the nation (Associated Press, 2008).

At the beginning of the twentieth century, a third of Vermont's workforce worked on farms, and only one out of twenty employees worked in professional services (Bolduc & Kessel, 2008). By 1940, the number of farm workers had shrunk to 25% of the labor force. Today, the percentage of Vermont workers classified as involved with "farming, fishing and forestry" stands at 1.3% (Bolduc & Kessel, 2008). As Hand (2003) notes, more people are employed by the ski industry in winter than by the agricultural sector in summer and fall. The top industry sectors in the state in 2007 (as a percentage of gross domestic product) were government, real estate, manufacturing and health care, respectively (Bolduc & Kessel, 2008).

### **Tourism and vacation homes.**

By the late 1800s, Vermont began to market itself as a tourist destination, specifically to those living in the cities on the northeastern seaboard. In 1911, the state established a Bureau of Publicity - the first state to do so in the country - and released a pamphlet entitled, *Vermont, Designed by the Creator for the Playground of the Continent* (Klyza & Trombulak, 1999). The



campaign apparently worked, and by the mid- 1920s, half of the cars on the state's highway bore out-of-state license plates (Klyza & Trombulak, 1999). By 1997, tourism was the number two industry in the state, attracting over 27 million visitors per annum (Klyza & Trombulak, 1999). Severance (2003) estimated that the travel and tourism industry employed nearly 50,000 Vermonters and generated spending in the neighborhood of \$2.5 billion per year, roughly a tenth of the state's total gross state product.

The decades-long influx of summer tourists, fall foliage tourists, and ski tourists have, in turn created a robust secondary housing market in Vermont. In the 1940s, almost 7% of Vermont's houses were "seasonal" (Klyza & Trombulak, 1999). In 1968, the number of secondary homes in the state was 22,000; by 1999, the number had increased to 47,000 structures (almost 15% of the state's total housing), the second highest percentage of seasonal homes in the nation behind Maine (Klyza & Trombulak, 1999; US Census Bureau n.d.).

### **Changes in Vermont demography**

According to the 2010 US census, the population of Vermont is 630,337 (the second least populous state in the country), 95% of which is classified as Caucasian. Covering approximately 9,250 square miles, Vermont is the fifth smallest state in the union. With 246 towns of 2,500 souls or fewer, "Vermont is demonstrably the most rural state in the nation" (Schmidt, 2003, p. 6). Its capital, Montpelier, has fewer than 8,000 residents, making it the least populated capital in the nation. Montpelier is also the only capital in the country without a McDonald's chain restaurant (Hand, 2003).

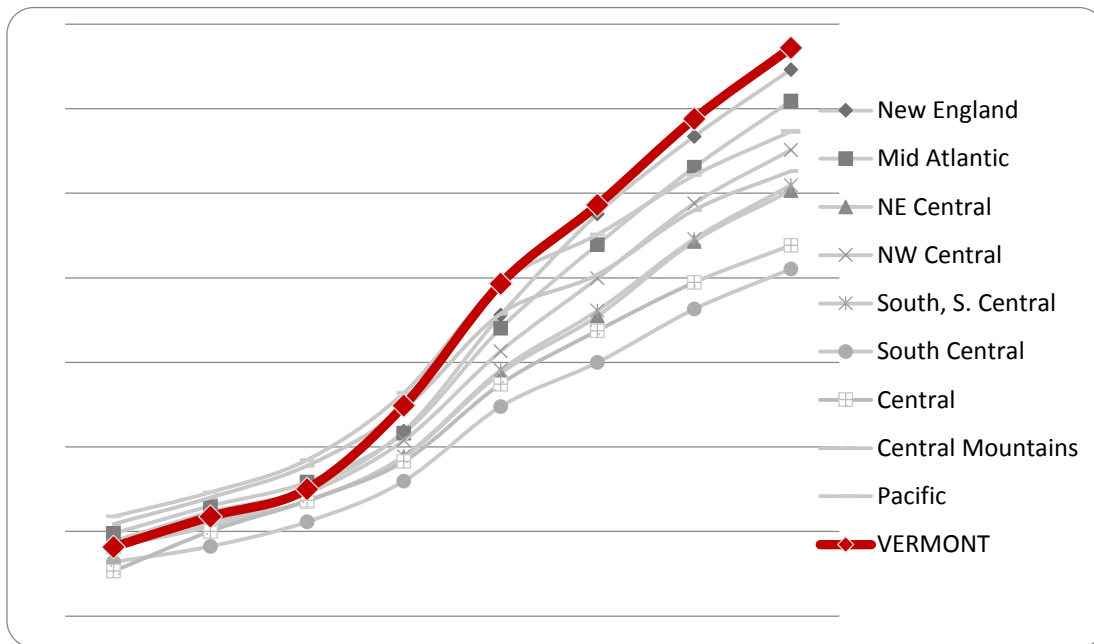
The stagnant population growth that bedeviled Vermont in the late 1800s continued into the twentieth century. From 1900 to 1950, Vermont's population grew the slowest of any state in the union (Bolduc & Kessel, 2008). However, from 1970 to 2000, Vermont's population

increased steadily; during the seventies, the state's population increased by 15%, the eighties added an addition 10%, and the nineties saw a population increase of 8.2% (Bolduc & Kessel, 2008). In-migration, particularly from other northeastern states, accounted for nearly half of the growth in the period between 1982 and 2004 (Bolduc & Kessel, 2008).

### **Socio-political impacts of demographic shifts in Vermont**

The issue of in-migration is significant. In 1960, three quarters of all Vermonters were native born. By 2005, the number of Vermont-born natives had dropped to about half of the population (Bolduc & Kessel, 2008). In-migrants to Vermont generally have higher educational and income levels than natives. It is estimated that 47% of immigrants possess a Bachelor's degree, as opposed to just 17% of native Vermonters. Educational levels rose dramatically in Vermont during the twentieth century (see Figure 3). In 1940, only 4.1% of the population had attained four or more years of college education, and the state ranked in the bottom half of states boasting college graduates. By 2007, the percentage of Vermonters with a Bachelor's degree or higher had risen to 33.6% of the population, ranking the state seventh in the nation for college degree attainment. The increase in educational attainment occurred in the last two decades of the 1900s. Writing in the early 1980s, Morrissey (1981) noted that the state had the lowest "aspiration rate" for high school students in the nation with regards to pursuit of further education. Morrissey also stated that more than 100,000 adult Vermonters had failed to finish high school, equivalent to about a third of the adult population at the time (Morrissey, 1981).

Figure 3: Increase in Vermonters with 4 or more years of college, 1940-2007.



Source: US Department of Census

Many of Vermont’s newest immigrants came from urban or suburban areas and were relatively unfamiliar with agricultural or rural life. They brought with them new attitudes and opinions which changed the political and social complexion of the state. From the outbreak of the Civil War to the 1950s, Vermont was solidly Republican and considered to be one of the most conservative states in the country (Slayton, 2003). It was not until 1962 that a Democrat was elected to the governorship, the first time in over 100 years (Hand 2003). Two years later, Lyndon Johnson won the state’s first support for a Democratic presidential candidate in over a century. Since the 1990s, the national image of Vermont has been one of an unabashedly liberal, “blue” state, but this depiction is a pat façade overlaying a far more nuanced political reality. Locally, the governorship has been shared by both parties over the past three decades, demonstrating that conservatism is far from dead in the state.

## Two Vermonts?

New Vermont landowners from the cities and suburbs of the east coast and beyond sometimes hold different attitudes towards natural resources than their Vermont-born neighbors. Meeks (1986b) postulates that Vermont-born residents tend to have a more pragmatic and utilitarian approach to natural resources than newcomers, citing the issue of logging as one example:

As late as 1948, farmers owned 49% of Vermont's commercial forestland. Today they own less than 20%. Farm use is generally a good use since these owners look upon their land as a money-making investment. This is not always the case with a new class of owners buying up old farmland. These "NIFP" (Non-Industrial Private Forest) owners are often a mystery. They include retirees, corporate executives, high school and college teachers, and people from a host of other vocations. In 1950 this class of ownership stood at 29%; today it is almost 60%. Many of these people regard their woodland as a social rather than economic asset. (p. 257)

Albers (2000) similarly sites a tension between Vermont-born residents and in-migrants over the "realities of rural life" (p. 314). According to Albers, misunderstandings between the two camps have spawned a "native born" pride backlash against newcomers over issues such as land use, property rights and other issues (Albers, 2000). The friction between Vermont-born residents and newcomers to the state has spawned a "divided house" polemic. Out-of-state visitors or immigrants are often simply, and derisively, referred to as "flatlanders" by locals.

Satterthwaite (1976) contrasts the two camps by evoking work and leisure:

We find in Vermont two nations, one of natives working the land and the other of seasonal players passively looking at the land. The first is represented by that dwindling group of people actually pushing, pulling, and working the soil of their own landholdings and the second by Vermonters and outsiders skimming greater distances over vaster surfaces, whether on highways or ski slopes. (p. 31)

Rutland Herald writer Andrew Nemethy (quoted at length in Meeks, 1986a, pp. 321-323) also speaks of Vermont as "two states: the rural farmlands and the bustling resort areas." Adds

Nemethy, the new in-migrants to the state do not bring axes and plows like the first settlers, but rather “conceptual baggage – preconceptions and ideas which are less concrete than a plow and an axe, but equally telling in the impression they carve on the land” (quoted in Meeks, 1986a, p. 321). While the difference between in-migrants and Vermont-born residents often veer into absurd clichés and caricature, there are very real differences between Vermonters over issues such as conservation, education, management of natural resources, and taxation, and occasionally these differences cleave neatly along Vermont-born and out-of-state-born lines.

This is not to deny variability within the two groups. As Nash (1975) sagely noted:

No family in town was too poor to have a television set, and this had something to do with a rapid change in ideas about the conduct of life. Many people still like well-kept old houses and gardens, preferred to can (and now freeze) their own fruits and vegetables, dig their own potatoes, and perhaps keep chickens or even a pig; like their old kitchen stove for warmth and good baking; kept family furniture and put what was not in use in the attic, along with spare parts for mending; laid by bits of iron, leather and boards; straightened nails; believed in saving money; and would do anything on earth to keep from coming on the town. Right alongside them, often in the same family, were people who longed to live in a mobile home or a tiny pre-fab with no attic or cellar, plastic furniture, automatic gas; to eat pre-cooked meals and commute to work; to buy on credit a camper, two cars with trailers for two snowmobiles, a fiberglass boat, and a riding mower for the tiny yard. This was not just an age difference; many older people wished for the simple life in the trailer, and some young people wished to get back to the simple life on the farm. (p. 70)

The debate between the “two Vermonts” came to the forefront in 1993 when the National Register of Historic Places named the entire state to its list of endangered places, citing development and suburban sprawl as inimical to the state’s pastoral landscape (Klyza & Trombulak, 1999). Supporters of the designation were viewed as elitists intent on preserving the landscape as a bucolic vacationland for the rich to the detriment of long-time residents (Klyza & Trombulak, 1999). Many Vermont-born residents feared that the designation would hamper development, suppress the local economy and deny residents access to goods and services widely

available in other states. A similar development-versus-preservation debate emerged later in the 1990s when Wal-Mart established its first stores in Vermont (at the time, Vermont was the only state in the nation without a Wal-Mart store).

## **Summary**

From the earliest days of state settlement, Vermont residents have gathered and used wild plants. The headwater for all of Vermont's gathering knowledge sprung from the Abenaki. European settlers borrowed extensively from Abenaki traditional lore, including knowledge of how to prepare maple sugar, the art of finding edible spring greens, and the use of plants and trees for medicines. Euro-American gathering now represents the predominant current of gathering in Vermont, with lingering small pockets of Abenaki gathering practices taking place largely out of sight, in the oxbows and backwaters. Unfortunately, much of the plant lore within the state was not diligently recorded by early settlers and the historical record of plant use in the state is fragmentary. While wild plant use in Vermont is not as celebrated or as well-known as plant use in Appalachia or other parts of the United States, evidence suggests that plant use was prevalent for both subsistence as well as medicinal purposes.

From settlement days to the present, making a living in Vermont has been challenging. For much of its history, Vermont has been an agricultural state where livelihoods were dependent upon natural resources. The use of such resources was often utilitarian. In the mid 1900s, Vermont's economy diversified, but job creation in the state was uneven, and opportunities remained scarce in the more rural pockets of the state. As a result, patchwork approaches to livelihood in the state are common. The difficulty of making a livelihood in Vermont was neatly encapsulated by a popular bumper sticker, seen often in the 1980s and 1990s, which read: "Moonlight in Vermont – OR STARVE." The slogan was a tongue-in-cheek

reference to the popular Blackburn and Suedsdorf song “Moonlight in Vermont,” and neatly contrasted the romantic vision of the state conjured by the song with the stark necessity of having to hold multiple jobs (to moonlight in the economic sense) in order to eke out a living in Vermont.

Within this economic framework, wild plant use has long provided residents with a supplemental source of food and income. Of all the wild plants products, sugaring provides the greatest amount of income for Vermonters, but its production on a large scale requires significant capital investment. Ginseng, cedar leaf oil and fern collecting produce smaller sources of supplemental income for Vermonters. Berries and spring greens and mushrooms mainly serve as important seasonal foods, and on occasion, are canned or sold.

Vermont is a state in transition. Its image as an agrarian state full of deer hunters and dairy farmers is now largely a relic (and an interesting relic as well, because both hunting and dairying have only been part of the state tradition for the last 150 years). However, the symbolism of the surviving agricultural spaces is potent because they define the character of the landscape and serve as a testament to the past. Some of my older interviewees grew up on farms or in rural areas in proximity to farms. These residents were familiar with growing their own food and living “off the land,” but this is a tradition that is in decline. In-migration of ex-urban and ex-suburban residents with little knowledge of rural agricultural life has created a new socio-political landscape in Vermont. Longtime residents’ ways of viewing nature and politics are often at variance with newcomers to Vermont. While some of the newcomers to the state have taken up gathering of plants and mushrooms, their gathering practices are subtly different from the gathering practices of Vermont-born gatherers. I will discuss these differences in the following chapters.

## Chapter 5: Results – An Introduction to some of the gatherers

I know that I am a forager because although I can't remember where I parked my car in a parking lot, I can always remember the exact spot where I found a stand of ostrich fern, a patch of lemony curly dock.

Susan Allport, *The Primal Feast: Food, Sex, Foraging and Love*.

The purpose of this study was to understand why a select group of contemporary gatherers in Vermont collected wild plants and fungi. Specifically, I wanted to learn how interviewees got into gathering, to discover what factors sustained their gathering practices over the years, and to ascertain how gathering fit within their lives. My interviewees formed a spectrum of gatherers, including ginseng diggers, herbalists, mushroom enthusiasts and gatherers of edible greens. Some grew up in families with gathering traditions, others adopted the practice later in life. While many provided similar reasons for gathering, it became clear to me that there were subtle differences between gathering practices that could be traced to upbringing, education, and values.

### Select gatherer profiles

Below are six gatherer profiles. The profiles are condensed portraits of individuals. The six profiles were selected to give the reader a glimpse of the breadth of gathering practices and practitioners, as well as to illustrate some of the themes that I will discuss in subsequent chapters.

#### **Dave.**

*Dave*, 78, was adopted at a young age by a farming family from eastern Vermont during the Great Depression. “It was a country farm,” he remembered, “Real poor. Real poor.” The farm had 15 cows which were milked by hand twice a day. His adoptive family also made maple syrup for additional income. The family canned all of their own vegetables and meats and only



bought cereal and hundred pound bags of sugar (for canning) from the store, because, as Dave recalled, “There was very little money.”

When he was not engaged in farm chores, Dave learned to hunt, fish, and trap. Deer provided extra meat for the table and a fox pelt could fetch 25 dollars, a significant sum for the time. Dave’s older stepbrothers introduced him to ginseng, a wild herb greatly valued as a medicinal in Asia. During free time in the fall, Dave and the older boys hunted ginseng, which they sold to a local druggist.

During his high school years, Dave awoke early in the morning, did his round of farm chores, walked five miles to classes - “It was the war and there wasn’t any gas,” he related – and then returned home for the evening chores. “I always had to work hard,” he declared. Dave left the farm for a two year term at a technical college and after graduating he worked as a farm laborer and logger. Dave eventually found long-term work at a gear shaping factory, where he worked for 34 years.

When the last of Dave’s five children left home in the 1980s, he found that he had “some free time on (his) hands” and he returned to hunting ginseng. “Then I really got into it in 1990 when I retired,” he related. He taught his son to hunt ginseng, and his son soon began taking a week of vacation from work each fall so the pair could roam the Vermont mountain sides in search of the elusive herb.

For a number of years, Dave found as much as four pounds of dried ginseng roots a season, nearly a thousand plants in his estimation. The roots fetched between \$300 and \$500 dollars a pound, depending on the market. However, Dave avowed that, “you could work at McDonald’s and make more money” than hunting ginseng because of the time involved. Still, the money proved useful if he needed to purchase an appliance for the house. His son often

purchased a new gun with his ginseng money, something Dave allowed was a “good investment.” “It’s a cash crop, really,” he said of the root.

Dave kept methodical records of his ginseng forays, noting locations, number of plants found and other remarks. He poured over topographic maps on winter evenings, searching for promising areas to explore based on elevation and aspect. “I have a list of places that I want to go to,” he said, “and when I go, I cross them off and hit another one.” Dave furtively hid his truck during outings so he would not be seen or followed by other ginseng diggers. “It’s a secretive thing,” he explained.

I asked Dave what his impression was of conservationists who have listed the plant as endangered and have called for a halt to its harvest. “I think they are full of baloney,” he stated flatly. “There’s more (of it) than there ever was.” Despite his perception of an abundance of ginseng in the state, Dave felt that few young people were carrying on the tradition. He listed computers, television, modernization and a deterioration of the work ethic as culprits for the decline in young ginseng diggers. “It’s too hard,” he concluded. “You aren’t going to get any young kid to do that. Why should he?” Dave was similarly disheartened by his grandchildren’s failure to maintain the family hunting tradition. Of his beloved deer camp, he lamented, “Our camp is going to run out of hunters when my boys are gone.”

When asked to explain the allure of ginseng, Dave shrugged and said, “It’s just something that I live for, I guess.” He related that finding a ginseng patch was a singular joy, for it set his heart “all a-flutter... it perks you right up.” Dave kindly took me ginseng hunting with him on a clear, balmy autumn day. We found half a dozen mature, harvestable plants. Dave conscientiously replanted the ripe ginseng seeds still hanging on the plants before digging the roots from the soil. He was careful not to scuff the roots, which would lower their value. When

I asked him if he always took all of the mature, harvestable plants that he found in a stand, he replied, “Yes, I do. I figure, it’s like deer hunting, if I don’t take it, the next fellow along is going to, so I take them.”

**Lucius.**

*Lucius* was born in 1950 in a non-electrified farmhouse in central Vermont on a road that bears his surname. As a child, he spent what free time he had fishing, hunting and exploring the woods. But living on a self-sufficient farm, his free time was limited. His family had a small herd of dairy cows and his father made a living selling milk and butter. They also raised pigs, goats, and beef cattle, and tended a large garden.

As Lucius related, “We didn’t go to the store and buy and buy and buy and buy.” Lucius’s family made their own soap, butter, and cheese; pressure canned or smoked their own meat; produced maple syrup and maple sugar from their woodlands; and put up much of their garden’s bounty for use during winter. His parents taught him to hunt, fish and gather wild plants. Of his parents, he said, “They had a wealth of knowledge, they really did.” Wild game and fish (venison, woodchuck, raccoon, squirrel, trout) and wild edibles such as fiddlehead ferns, milkweed, dandelions, wild apples, wild blackberries, raspberries, shadberries, butternuts, walnuts, beech nuts and wild mushrooms (Lucius specifically mentioned chanterelles, morels, “gray ladies,” and honey mushrooms) featured prominently in the family’s annual diet. Wild mints and goldenrod were gathered and dried for medicinal use. “You know,” Lucius related wryly, “We didn’t have Alka-Seltzer.” To earn extra income, Lucius’s grandfather made maple candies with butternut meats and his mother candied the rootstocks of the wild sweetflag plant (*Acorus calamus*). The confections were sold locally, as well as nationally through a home-run mail order business.

When Lucius finished high school, he took a two year associate's degree in metal cutting at a technical college and entered the work force as a tool and die maker. At age 50, he lost his job. Unwilling to move in search of new work, Lucius says he, "went back to what (he) knew," namely farming, and, in the tradition of his grandfather and his mother before him, running a home-based business. Lucius cans and markets over 40 varieties of pickles, jams and chutneys, selling his wares at 10 summer farmers markets and 6 winter markets across the state. Lucius and his wife grow the bulk of their own produce (supplementing shortages with purchases from local co-ops) and can their goods on a four-burner gas stove in their farmhouse kitchen. The couple buys more than \$10,000 worth of canning jars a year. Some of the recipes they use are old family secrets. In the winter, Lucius also teaches at a local technical school to earn extra income.

All of Lucius's products are from cultivated sources, save one – the fiddlehead fern. Each spring, Lucius and his wife spend two full weeks collecting fiddlehead ferns from the wild. They sell approximately 200 pounds of the ferns as fresh greens and pickle an additional 500 pounds. The pickled fiddleheads are one of their most popular items and sell out by late summer each year. The couple nets well over \$3000 from the sale of fresh and canned fiddleheads per annum. When I ask Lucius if his pickle business is a supplemental source of income for his retirement, he shakes his head vigorously in the negative. "No, this is my income," he states. "We figured out quite a while ago that probably the government wasn't going to help us a great deal."

**Nancy.**

*Nancy* grew up on a central Vermont farm during the Great Depression. Nancy's family raised pigs and chickens and kept a milk cow. In winter, they cut ice from a local pond for use in

the farm's icebox. Farm life, she recalled, "wasn't easy," but she also related that, "it was a good life for a kid." Nancy's family had three large gardens and her mother "would can and put away 500 jars of stuff." Her family also made jellies and pies from apples, crab apples, wild blueberries, blackberries and raspberries. As she explained, "You had to survive. And you couldn't afford to buy it (fruit)." Nancy remembered a neighbor who sent down a large Christmas pie every year:

"Can you imagine that? How much that took to do that? That's what they did back then. They didn't give you money or presents or clothes or stuff like that. It was food. Everybody wanted food."

Nancy married a first generation Italian granite sculptor. Nancy's husband introduced her to rabbit hunting and collecting wild porcini mushrooms, traditions imported from rural Italy to rural Vermont. From her mother-in-law, who spoke no English, Nancy learned how to cook traditional Italian dishes such as risotto. When I spoke with one of Nancy's sons, he fondly recalled that his special birthday dish growing up was rabbit with polenta and wild porcinis.

Nancy did little gathering as a child, save for wild berries, but she did recall that her father used to gather "the red mushroom" (presumably a *Boletus* or *Leccinum* species). Nancy and her husband never collected or ate the "red" mushroom; they only ate what she called the "white one," the porcini (*Boletus edulis*). Nancy and her husband and children, when they were old enough to go gathering, hunted porcinis every summer for years. The best time for gathering porcinis was when the "mushroom moon" was out, a hazy, orange-hued new moon seen in late August. Often the family would go out before dawn and come home when her husband had to go to work. Or they would leave for the woods in the late afternoon when her husband's shift was finished, and bring along a picnic to make the outing a family occasion.

Mushroom forays were “work” in Nancy’s eyes. The endeavor was fun, but purposeful, for the goal was to find food for the table. It was not, she said, “Going for a ride, driving around and wasting gas.” One year, her family found a bonanza of porcinis and Nancy spent several nights canning the mushrooms over a wood-burning stove at their camp. The final tally was 148 pint jars of porcinis.

Nancy and her family hunted and fished their entire lives in Vermont and Alaska (one of Nancy’s sons moved to Alaska, and Nancy joined him there for a period of twelve years). “We lived off of the land a lot,” she declared. She remembered shooting partridge as meat for the table. The legs and breasts were served, while the rest of the bird was boiled and used to flavor dishes. “You didn’t throw it away,” she explained. When I ask her if her sons or grandchildren continued to gather porcinis, she shook her head no. Many of the porcini patches are gone, she explained, and her children have little free time for it. Looking back on her life, Nancy stated, “Our family, we all hunted, fished, gathered mushrooms, we were busy all of the time doing something to survive, whereas kids today, they don’t have to worry about that, do they?”

**Stan.**

*Stan*, a 46 year old video and TV producer, grew up in north-central New Jersey. As a child, he enjoyed playing in the woods. Stan’s father, who he described as a “Euell Gibbons fan,” introduced Stan to his first wild foods, including poke weed, fiddlehead ferns, and maple sap tapped from trees on their four acre lot. As a child, Stan vacationed in Vermont, and when it came time for college, Stan chose the University of Vermont. What drew him to the university and the state was the opportunity to ski. Stan ended up staying in the state. As he remarked, “Just the general vibe here was excellent.” He enjoyed the “relaxed” pace of life, the lack of

commercial development, the abundance of nature, and opportunities, in his words, to “play” in the landscape.

After college, Stan bought several books on wild edibles and began gathering. Working in the restaurant business for a time sparked further interest in wild foods. He learned to gather a wide array of plants and fungi – fiddlehead ferns, wild leeks, dandelions, milkweed, stinging nettles, various berries, lamb’s quarters, sorrel, cow slips, cattails, morels, chanterelles and puffballs. When his two daughters were born, he began taking them into the woods on hikes and teaching them about edible plants. Gathering with his children served multiple purposes. It was a way to give the girls some experiential education about nature and the sources of food, but it was also another way to entertain and distract his children, thereby keeping them engaged during outings. Any gathered and eaten food was often just a “bonus” to being out in nature with his family.

While much of Stan’s gathering provided incidental food to his diet, he did self-provision by canning or freezing abundant species such as nettles and fiddleheads (“a pickled fiddlehead in a martini is a great thing,” he confided). Stan stated that he believed wild foods to be more nutritious than conventional, store-bought food, and he valued the freshness of wild foods because they were usually eaten or processed for storage the same day as harvest. Stan particularly reveled in gathering lore, delighting in how to use different parts of plants in different ways, such as for food, dyes or tinder (which came in handy for his other hobby, French and Indian War re-enactments). Of poke, he said, “You can eat the shoots, and the berries are great for dying, but it’s also poisonous, so that was an interesting thing.”

General fascination with wild plants drove much of Stan’s interest in gathering. But a low-budget trip across the country in the 1980s also spurred his interest in learning wild edibles.

As he related, “I thought it would be a good idea to know a few things here and there, just in case I needed it.” Later in the interview, he re-iterated that gathering skills might come in handy “when the shit hits the fan.” Although Stan felt that gathering in our present day society wasn’t a “practical” option for the populace to self-provision, he believed it had a place. “It sort of just has to be a hobby,” he stated, “but it’s a good skill to have, just in case.”

### **Stewart.**

Stewart grew up in New Jersey and Illinois, but vacationed in Vermont where his mother’s family owned a camp. After graduating from the University of Vermont in 1970, he stayed on as a resident, working odd jobs. Eventually he got a job at a public library, earned a master’s degree in Library Sciences, and became one of the library’s directors as well as its reference librarian. He also secured a job at the local public radio station and has earned additional income over the years as a musician.

Stewart is a self-avowed “foodie.” He also characterized himself as a “looker” and a “lover of details,” someone with an eye for spotting the errant mushroom or a lost earring. Stewart’s gathering began with fruits. During his first few years out of college, he gathered wild black raspberries and traded them to Ben & Jerry’s Ice Cream for free ice cream (back when the company was just a small start-up in a converted gas station in Burlington, Vermont). Stewart also collected fruits and nuts from Burlington’s street trees, much of which was going to waste. He recalled picking 85 pounds of pears from one city tree. “We made pickled pear and pear kim chi,” he remembered, “it was just really spectacular.”

During his first year in college, Stewart took a number of science courses, did poorly, and switched his major to English, a subject at which he excelled. As he explained, “I didn’t think that I had it in me to remember all of those Linnaean names.” After college, he took a



continuing education course on mushrooms, fell in love with the topic and began collecting mushrooms and mushroom books. He and some friends even formed a mycological club in Burlington. During the interview, Stewart casually peppered his conversation with Linnaean binomials and mushroom genus names, his apprehension of scientific names obviously overcome.

Working odd jobs in his first few years out of college, Stewart had little money. He occasionally sold mushrooms to restaurants or bartered mushrooms for meals at some of the city's finer eateries. Stewart stopped selling wild foods long ago. In Stewart's eyes, wild foods were "a gift." He stated, "For me to try to make money at it (gathering) seemed sacrilegious." While he did not execrate those who sell wild edibles, he worried about the potential for mushroom poisonings. He felt that relying on income from the sale of wild edibles was difficult and led to "desperation" and "dishonesty," citing examples of gatherers renaming plants and fungi as marketing ploys (e.g., calling Japanese knotweed shoots "red asparagus," or referring to dryad saddles as "pheasant-back mushrooms"). Stewart told me of finding a large, essentially inedible *Polyporous squamosa* at a local co-op. "Fricking things were hard as this table," he remembered. He quickly searched out the produce manager and told him, "I just want you to know that if this guy is selling you this stuff now, that you can't trust him to sell you anything, because he will sell you anything." Stewart harped on the potential dangers of commercializing wild mushrooms several times during the interview. "It's scary!" he cried, "People could get very sick or die."

For Stewart, finding new and unique tastes was part of the allure of gathering. He made his own fruit leather from wild fruits gathered in Burlington. He grew shiso (*Perilla frutescens*), the edible leaf used in Japanese sushi restaurants, and created a distillery to turn the leaves into

oil. He later used the same contraption to make homemade mint oil as well. He spoke rhapsodically about wanting to try to candy wild angelica, to pickle butternuts, and to make a small distillery for turning feral quinces and pears into spirits. Stewart said that he loved to create and share unique foods from gathered plants and fungi. “You can make presents for people that don’t exist anywhere else,” he declared, “things that you’ve made, and they just can’t even believe how delicious it is.”

What Stewart particularly enjoyed about gathering was the ability to engage his senses. He relished looking at forms and patterns and shapes. But above all, gathering was just plain fun. “It’s a treasure hunt,” he explained in reply to my question about what drove his passion for mushrooms. “We all get to be little kids again,” he continued. Recalling a recently found patch of morel mushrooms, Stewart avowed, “It so much fun, you dance around.. it just sends you. It’s the best thing.”

**Penny.**

*Penny*, age 60, is a self-described “refugee from Connecticut.” Holding a bachelor’s degree in philosophy and a master’s degree in early childhood education, she taught at inner city public schools in Hartford, Connecticut for 14 years. Penny then moved to upstate New York, where she studied with noted herbalist Susan Weed for three years before finally settling in Vermont. When asked why she moved to Vermont, Penny replied that the state attracted her “vibrationally.” When I asked Penny to clarify, she stated:

It’s a vibrationally high place. I think it’s a Mecca at this point... I find a lot of people paying attention to what’s going on on the planet. To the vibration of the earth. To the state of human existence as we are living it right now, what modern life is about, and how sustainable or not it is, and really understanding that it is not.

In Vermont, Penny continued her studies with nationally-renowned herbalist Rosemary Gladstar. She began using herbs to treat some physical challenges that she was experiencing. In the late 1980s, she launched an herbal extract business and sold tinctures made from echinacea, St. John's wort, yellow dock and threatened wild medicinals, such as goldenseal, all of which she cultivated. Penny drew upon various healing traditions and knowledge bases. She mentioned Native American healers whom she had consulted with several times during the interview. When describing the necessity of ingesting spring greens such as dandelion, she noted that bitters provided the body with movement of "*chi* energy." Her amalgamation of healing traditions was a result of history, she claimed. "The inquisition was real – they really put a dent in western herbalism, both energetically and knowledge-wise," she opined. By contrast, she claimed that Chinese medicine had an unbroken lineage, and thus their medicine was "very strong."

In 2003, Penny founded her own school. The school's website advertises:

Experiential programs embracing the wild plants, holistic health and sustainable living skills, valuable tools for living on the Earth in these changing times... We offer perspectives on healthy life-style practices, ecology, natural history and the timelessness of communion between nature and self. The emphasis is on integration of the intuitive and scientific, all in a relaxed, magical and grounded atmosphere.

In addition to her school work, Penny also led wild edible walks around the state; taught classes on dowsing with the use of a pendulum; gave lectures of wild edibles; provided landowners with assessments of their property's potential for producing wild foods and medicines; and wrote about wild edibles and sustainability. At her wild edible lectures, she provided hand-outs entitled, "Wild edibles in the age of re-localization." The sheets included recipes for cooking or pickling common species such as burdock, dandelions, milkweed, cattails, Japanese knotweed, marsh marigolds, Jerusalem artichokes, wood nettles and wild leeks. She was also involved in a

local Transition Town group that aimed to build local resilience to peak oil, climate change and economic upheaval. During winter, she also cleaned houses for supplemental income.

The major focus of Penny's teaching was to enable students to "reconnect with nature." Penny emphasized plant communication as a pathway to nature appreciation. She and her fellow teacher at the school, Mark, both referred to plants as "beings" and "spirits." Penny encouraged student to talk to plants. Students had to seek permission from a plant prior to harvest (and avoid plants that denied permission) and then were instructed to give thanks after harvest by offering, "a piece of hair, or spit, or tobacco, or cornmeal, or whatever, thanks from the heart." When I asked Penny why this was important, she stated:

The plant is a spiritual being. It's not a box of cereal on the shelf that you grab when you need something to eat. You're interacting with another species, another life. It needs to be honored.

Penny noted that many people talk to pets, horses, trees or angels. Expanding one's consciousness to communicating with plants was, in her eyes, merely a further step in the continuum. For Penny, plant communication was vital for establishing a connection with nature and insuring that harvest practices were carried out in a sustainable and respectful way.

Penny was a vegetarian and avoided sugars and processed foods. She described wild food as "good food" that is "nutritionally dense." She was a proponent of local, organic farms and avowed that wild foods were important, complementary sources of diet that enhanced local food security. She did not sell any of the wild edibles she collected; rather what guided her passion was the educational component of her work and the ability to foster lifelong connections between her students and the natural world. "Nature feeds the soul and it feeds the eye and it feeds the belly," she reflected.

## **Summary**

These six profiles (one quarter of my interviewees) demonstrate a range of reasons for gathering, including self-provisioning, income generation, self-medication, and experiential education. Of the six profiles presented above, three are of gatherers who grew up in rural settings and three are of gatherers who grew up in urban or suburban settings. In the following chapter, I will discuss all of the interviewee's reasons for gathering and reveal a number of commonalities amongst this varied group of gatherers. In a subsequent chapter, I will discuss the differences between interviewee's gathering practices by exploring some of the themes exposed in the profiles above. Specifically, I will delve into the significance of how gathering knowledge is obtained, address the issue of gathering for financial gain, and discuss how gatherers hold very different values toward gathered resources.

## Chapter 6: Results – Reasons why Vermonters gather wild foods and medicines

In the woods, too, a man casts off his years, as the snake his slough, and at what period soever of life is always a child... In the woods, we return to reason and faith. There I feel that nothing can befall me in life – no disgrace, no calamity (leaving me my eyes), which nature cannot repair.

Ralph Waldo Emerson, *Nature*

The gourmet gatherer is the ecologist. Because he renews his relationship with nature he understands the importance of clean water, uncontaminated earth, unsprayed fields, trees and roadsides. The wild foods he eats nourish his spirit as well as his body.

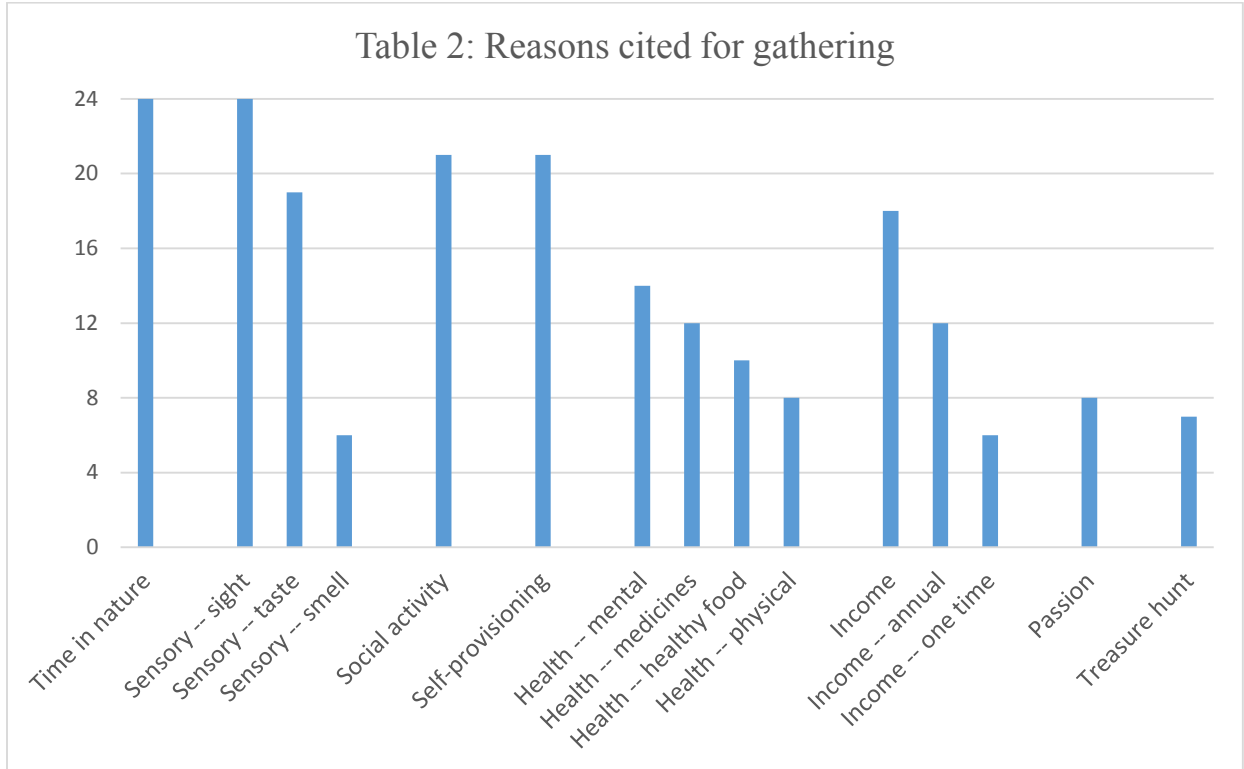
Adele Dawson, *The Gourmet Gatherer, or How to Feed Holiday Guests Without Increasing the Food Budget*

### Introduction

This chapter presents a descriptive analysis of why contemporary Vermonters gather wild edibles and medicines. The first half of the chapter quantifies answers given, while the second half discusses more intangible, unquantifiable benefits that respondents reported experiencing while gathering. The chapter closes with a brief discussion of factors that maintain or inhibit continuance of gathering practices in Vermont.

During the interview process, respondents were asked several times to describe why they gathered. Spending time in nature was the most prevalent and often-repeated answer to the question. All 24 respondents also mentioned deriving some sensory pleasure from gathering, in particular, a visual enjoyment. Gathering as a form of self-provisioning and gathering as a social activity were the next most prominently cited reasons. Gathering for health (both physical and mental), gathering for income, gathering as a passion and gathering as a treasure hunt rounded out the final reasons given for engaging in the activity (see Table 2).

Table 2. Reasons cited for gathering.



*Note:* Sensory, health and income reasons are sub-divided. N= 24.

Below, I discuss each reason for gathering in greater detail, citing quotes from gatherers and using supporting literature where appropriate.

### **Gathering as a way of spending time in nature**

According to naturalist E.O. Wilson (1992), human beings, “descend farther from heaven’s air if we forget how much the natural world means to us” (p. 351). Wilson’s pronouncement concurs with many of my interviewees’ view of nature. When repeatedly asked their reasons for gathering, every respondent mentioned, first and foremost, that they enjoyed spending time in nature. Perhaps, as Wilson (1984) put forward in his biophilia hypothesis, humans have a natural, deep-seated affinity for nature.

In many ways, gathering is closely aligned with gardening; both activities involve intimate interactions with plants, weather patterns, and the seasons. Salsedo's (2007) research shows that gardening is an activity that creates an enduring relationship between humans and nature. I posit the same is true for gathering. The American environmentalist, Paul Shepard, would likely concur. According to Shepard (1998), atavistic activities like hunting and gathering are hard-wired into our DNA. In Shepard's eyes, the desire to spend time in nature is an innate need born of our Pleistocene hunter-gatherer heritage.

Expressions of appreciation for spending time in nature fell into three themes: general statements of a love for nature or nature's beauty; appreciation of nature as a source of rejuvenation or mental healing (discussed in further detail below under "mental health"); and reverence for nature, i.e., equating being in nature to a quasi-religious or sacred experience. Below are several examples of statements that I considered to be general appreciation for nature, ranging from simple statements to heartfelt confessions.

Well, spending time in the woods is a lot of fun. It's relaxing (Joseph).

I really enjoy being in the woods. I like seeing the differences and changes of things as it goes on. And finding all of the nice, you know, there's big rock falls in the back. And go up there, you get to see, you know, ten miles up in the mountains, and the valley – beautiful locations (Tom).

Really, (gathering is) a reason to be in the woods, to be out in nature. It's a good reason, but it doesn't matter if I don't do anything, you know, if I'm just walking around and I don't find anything, it's great, it's still a good day. You know, a good day in the woods is better than a bad day at work, or a bad day in the woods is better than a good day at work (Stan).

I like the woods. I like to be out in the woods... If I had my choice of dying, I'd just as soon die out in the woods, 'cause I would be happy. Woods make me happy (Dave).



For two respondents, gathering provided an avenue for communing with plants in a spiritual way:

I'm sitting here talking to you but I'm also very much sitting within, and relating to a multitude of beings. And that's very palpable to me. And actually living here, all of my relationships to this landscape, and all the beings here, is particularly fine-tuned and ongoing. So just on a perceptual/visual level, I mean, I'm constantly noticing all of the subtle changes from day to day, and weather... But really, that's just the tip of the iceberg. It's really... at this stage in my journey, I'm very present to all these beings as spiritual beings. I'm in contact with them and feeling their presence in a spiritual space that subsumes sensory experience. So, when I take a walk, you're going through the same, you're walking by the same friends every day and you notice things. And also one way of connecting, and one way of being in the world is: we have to eat and we take in physical substance. And so, connecting with the taste and the feel in the mouth of an actual twig, you know the actual growing edge of this very different but totally akin being, is kind of a sacrament of relationship, you might say, not that I get all solemn about it, but it's, it's just part of the flow and part of the image of the blood brothers concept (crosses arms as if touching one open cut to another). It's a way of connecting with beings who are very different from us but, with which we are also totally one (Mark).

So it's very important to relate – and I truly put out that it's the birthright of every human being to relate to a plant on a spiritual level. You don't need special training, you don't need to study for twenty-five years. You need to un-train... I believe we can communicate with everything, from algae and bacteria to, of course, cats and dogs. That's, that's a little more reasonable for folks to take in. Horses. Trees. People tend to be able to talk to trees pretty easily. I know a lot of people who talk to trees. And then you just need to be able to make the next leap. Can you talk to a dandelion? And you make the next leap, can you talk to a flea? And then you make the next leap, can you talk to a piece of mold? You know, I know people who are very conversant with horses who cannot imagine talking to ants. It's a very interesting thing. But we're working with this, this concept of communicating with all species. And it can be on any level – it can be on the heart-connection, it can be a wave of feeling. I've written down poetry that I've gotten from trees. And then there was a point that it ended. The trees weren't talking to me anymore and I was very upset. And what I got from that was, you don't need to have language anymore. Your communication with trees is simply on the level of exchange of love (Penny).

For Larry and Cormac, gathering provided a quasi-religious experience:

To go out with my pack, my camera and a lunch and walk in the woods for the day is about as close as I can get to God (Larry).

The closest thing I've ever experienced of what I would call God has always been in the woods and nature (Cormac).

Cormac additionally used the term "awe" to describe nature on five separate occasions during his interview. Experiencing awe, humility or finding a spiritual connection through interacting with nature and plants was also one of Salsedo's (2007) five themes for explaining why people enjoy gardening. Likewise, reverence and spirituality factored heavily in Alexander's (2008) research on place attachment in northern New Hampshire.

### **Gathering as a sensory experience**

Gatherers revel in the sensory experiences afforded by their forays into nature. The practice of gathering is highly visual. Taste and smell also feature prominently, particularly when preparing and eating the day's harvest.

#### **Sight.**

All of my interviewees stated, in one way or another, that they derived visual pleasure from gathering. For Mark, gathering at a spot he calls "the place of the dancing birch," a yellow birch he described as "gracile," provided great pleasure. Others gatherers merely waxed poetic over the beauty of a particular forest, plant or mushroom. Stewart was the most articulate of the interviewees in terms of expressing his love of the visual aspects of gathering. He explained:

I get to look at forms and shapes that repeat themselves in the clouds and in pictures that I have seen of underwater stuff. I see all these wonderful colors that don't exist on film. And it's, it's, it's just the best thing. It's every sense that I have left.. I can use them all. It's just spectacular. And I think that that's part of it, too. That, and, and, you know, the variation in color and shape is an allegory for life. You know, you're always looking for variation in color, in shape. And looking for little glints of color and little interesting curves and that's part of the pleasure for me.

Later in our interview, Stewart discussed finding angelica in the wild for the first time.

"It has a reddish-purple stalk, almost like rhubarb. And then this *unearthly* green kind of second-

leaf thing coming out of the sheath, it's *really* beautiful, it's really lovely." When Liz and her daughter found a large bed of chanterelle mushrooms, she recounted, "It was like the golden road in Wizard of Oz! Filled with all of these mushrooms." Likewise, Cormac referred to chanterelles as "nice packets of gold," in the woods. Berta was passionate about mushrooms because, "they come up over night and in the most beautiful colors and forms." She has used her mushroom finds as the inspiration for dozens of skilled, vibrant watercolor illustrations of the fungal kingdom. Berta summarized, "Mushroom hunting is aesthetically a very wonderful experience." Ginseng digger Russ was able to spot the plant in the fall because it develops a distinctive hue. "It turns a shade of yellow that you can see for a hundred yards if you know what you are looking for..it's just a pretty yellow." Dave also mentioned the "brilliant yellow" that ginseng turns before it dies, noting that the color of the leaves and the bright red seed heads are two of the best ways to distinguish the plant from others in the forest understory. And when I asked Stan why he liked fiddlehead ferns so much, he replied bluntly, "They look really cool."

### **Smell.**

One of the reasons Cormac loves chanterelles is because of the apricot-like aroma they emit. Anthony enjoys snapping off a yellow birch twig and inhaling its wintergreen odor as he walks through the woods looking for mushrooms. Ward dries several pounds of morel mushrooms for cooking during the year. Even after he has finished eating them, he still keeps the jar unwashed to remind him of the delectable mushrooms: "I can just take the cover off and smell the jar!" Eric's daughter is able to locate a patch of black trumpet mushrooms solely by smell. Eric reported:

She has an uncanny nose. And she actually found a patch that I, that I had passed over many times, just by, evidently, just by the smell of it. Marvelous!

Ida and Leonard enthused about the fragrance of the scented coral mushroom and claim that the fungi stops emitting odor when its neighbors are harvested.

### **Taste.**

During my interview with Lucius, he stated, “Once people are introduced to wild foods, they crave them.” When I asked him to explain, he turned the question around on me and inquired, “Which do you like better: farmed or wild salmon?” “Wild,” I replied. My newly-turned-interrogator asked me to clarify my answer. “Because it tastes better and the texture is firmer,” I admitted. “It tastes like salmon,” rejoined Lucius, “you know? When people get used to eating wild foods, they want more.”

The more I spoke with gatherers, particularly gatherers of wild mushrooms, the more prophetic Lucius’s hunch appeared to be. Taste was an important feature for nineteen of the gatherers interviewed. When I asked Jen and Anthony why they collected wild mushrooms, they responded, “We’re going for taste. Definitely.” Of morels, Anthony stated that their taste was “unique.” “You’ll never taste anything like that,” he explained, “the wild stuff has more flavor.” Stewart similarly loved porcinis because they had a meaty, “*umami*” taste when fried that was, in his words, “just exactly right.” Nancy, Joseph, Tom, Gillian, Stewart, Ward and Berta all spoke with enthusiasm about the taste of wild mushrooms and spontaneously related some of their favorite recipes to me. For Nancy, it was porcinis in polenta; Tom enjoyed morels in a white sauce accompanying a steak; Ward preferred his morels paired with a haunch of venison; one of Gillian’s favorites was a fiddlehead and ramp quiche; Stewart made a savory chicken dish with apricots and chanterelles; and Joseph made a traditional Italian antipasto with porcinis each year that he shared with friends and family.

Taste is a powerful sense, able to summon memories of the past. *In Remembrance of Things Past* (Proust, 1924), the taste of a madeleine, a small tea cake, famously brings the past vividly to the author's mind's eye, "like the scenery of a theatre" (p. 36). Stewart clearly remembered finding and tasting his first raspberries at his mother's camp in Vermont as a youngster. Gillian's face glowed when she discussed eating butter-fried morels on toast as a child. Similarly, food writer Michael Pollan (2006) remembers eating his mother's beach plum jelly during winters in his childhood, describing the taste as "August on toast" (p. 278). Jeremy also clearly remembered the first time he tasted chanterelle mushrooms after a fishing trip with his father:

We wandered across some orange mushrooms and he (Jeremy's father) said, "They're chanterelle mushrooms." So we went and picked them and brought them home and we had fried brook trout with those mushrooms and it was just go good, so great to taste them together. It's like a natural pairing and I'm sure it's something that goes back to ages and ages ago, of people find them and catching the fish and eating that meal. I'm sure the Native people probably ate that same meal often because both of them are native to this area.

Jeremy was also introduced to fiddleheads at a young age and stated that, "Every spring, I'm anxious for a taste of a fiddlehead and a brook trout." Penny expressed a similar anticipation of eating wild foods at the end of the long Vermont winter: "I'm dreaming of my first bite of fresh dandelion or *Hemerocallis* shoot, or that first wild leek," she related. Stewart concocted "black raspberry hooch" by mixing wild black raspberries and Everclear. "In the wintertime, it tastes just like summer," he waxed. As these quotes demonstrate, taste plays an important part in gathering. The taste of wild foods gives gatherers intense sensory pleasure, but taste also serves as a doorway to past memories, serves as a source of yearning and anticipation, and is a reification of time and place ("the taste of summer").

## Gathering as a social activity

Twenty-one of my twenty-four interviewees stated that they gathered with family, friends or neighbors. For Ralph, hunting ginseng was a relaxing way to spend time with his son and grandson: “It’s just nice to get out into the woods with the family and get the exercise and just be together doing nothing.” Larry also treasured his time with his family in the woods looking for ginseng:

Our son was home this fall from California and he and my wife and I went out. Had a wonderful day in the woods. And he was here for a wedding and a visit for a week. Clearly it was the nicest day of his visit. There was just something about, you know, sitting on a log and eating a sandwich and talking that is special for me. And our daughter, who was very girly, and, uh, one day this season, when I got the bug and my wife was off work, and I was conflicted, you know, so I said, “I really want to go out and ginseng, it’s a beautiful day.” And we didn’t know, we didn’t feel comfortable leaving our daughter, and, I said, “Hey, she’s been out with me before.” So I said, “You want to go ginseng?” She was, like, “Sure.” I was, like, “Okay.” And it had been a few years. And, it was just a great day.

For the Italian community of granite workers in central Vermont, gathering porcinis was a cultural activity imported from the old country. The mushrooms connected the immigrants to the rich culinary traditions of rural Italy. Joseph described how the Italian community in central Vermont used to turn porcini hunts into social occasions as well:

..You’d drive along the road, and there were all these cars there. And the men would be up in the woods picking mushrooms and the women would be sitting on the running boards of their cars or open the door and sit where they could. And they’d have their skirts on, and they’d open their legs and put their skirt down like this, full of mushrooms, you know? And they’d be there cleaning them and cutting them up, they’d get them all clean. And they’d talk. And we’d come out of the woods, the men would come out with bags, bushels of mushrooms and just dump them there and they’d put them in their dress and they’d head back out again and get more. They’d make a day of it, you know? Of course, they had their bottle of wine with them and everything else, and their sandwiches and whatever they had to eat, they’d take with them a lunch. They’d make a good day of it. We used to do that, my family used to go up, same place. At one time, there was one place, you drive way up in the woods. You could stay there all day picking. Have a picnic at the same time. Have a few bottles of wine there, and sit down and have lunch.

Liz felt that companionship in the woods was vital. “There’s nothing like walking through the woods with friends,” she related. Liz made friends with a number of mushroom experts across the country and annually attended a mushroom conference in Telluride, Colorado just to spend time with old acquaintances searching the Colorado forests for mushrooms.

Sometimes friendships revolve around, and are strengthened by, gathering. Russ referred to Larry as his “ginseng digging buddy.” Tom likewise valued the camaraderie he experienced hunting mushrooms with his neighbor Anthony:

I always look forward to going out with Anthony and doing it because we usually have a good laugh. Cause that’s it – we walk along and talk about all kinds of stuff. And he’s got this bag that he brings and he usually brings a couple beers, ‘cause we have room for it and what-not, and go up, and so we have a good chat as well as, you know, finding stuff and it’s always exciting to find big ones, you know? And, “Oh, look! Here’s a mushroom patch over here!”

Not all of the gatherers I spoke with thought of the activity as a social endeavor, however. Three of my interviewees gathered alone, while another three professed a preference for gathering alone. Of the six who valued gathering alone, five were male. When I asked the interviewees why they preferred to gather alone, most said they enjoyed the solitude. Two men also stated that they liked to move quickly through the woods; for these two, having extra people along on a gathering foray was an encumbrance and distraction. The majority of my interviewees preferred to gather with family or friends, a finding that is consistent with Alexander’s (2008) research on place attachment in New Hampshire. For many of Alexander’s interviewees, spending time in nature was meaningless if they could not share the experience with a loved one.

Half of the interviewees mentioned sharing wild edibles or medicinals with friends and family. The food writer, Michael Pollan, (2006) claimed that there is an element of conspicuous

production and showing off in sharing wild foods with family or friends, but also conceded that sharing a meal is a way to honor one's friends. I mention sharing as a social aspect of gathering because gifts perform a crucial role in cementing and maintaining familial and communal bonds (Hyde, 1983). My interviewees revealed a number of instances where the sharing of wild foods strengthened bonds with family and friends:

Part of it, part of what's more rewarding is just having a connection between picking something and then finding people, just giving it to friends. I probably give away more than I sell. Just having that excitement. "Oh, my God! These are great!" Or trading with a friend for a bottle of hard cider or something. To me, that's more rewarding than selling them for money... We forget that this is why we're, what we're really looking for is a human connection between people. So that's the enjoyable thing (Cormac).

Cormac derived particular pleasure from giving wild edibles to a nonagenarian neighbor who was on an oxygen tank. The man was once an avid outdoorsman, but was unable to physically get out anymore. Said Cormac, "It's nice to see their eyes light up when you bring them that stuff." Joseph similarly lamented the decline in sharing of porcinis amongst the Italian community in central Vermont, particularly sharing with the older, infirm residents:

I'd just like to see it the way it used to be. People go picking for their own use or to give to their friends or something like that, or to bring to them to the older people who can't get out anymore. Give them to the older people.

Stewart enjoyed sharing wild foods with friends because they made unique and tasty gifts. But he also said of sharing that it was a manifestation of friendship:

The idea is to somehow impart to them what it is and why you did it. And probably because - why you like them, why you took the trouble to share it with them, as opposed to not sharing it with them.

Jeremy enjoyed giving fiddleheads to friends who appreciated the taste of the ferns, because that appreciation validated his gift, his gathering, and the friendship itself:

When you have something that you've gotten yourself, on your own, and you find somebody that enjoys it, something in our nature says, "Well, here, have a little



bit, try it.” I think it’s just that feeling of knowing that giving something to somebody that you know they like – and if you like it yourself – you know that they are really going to appreciate it.

### **Gathering as self provisioning**

Seven-eighths of the respondents (21 of 24) gathered wild plants and fungi to consume as food or medicine. Of the group that gathered for self-provisioning, nine preserved some materials for the long term, through freezing, drying, pickling or processing into tinctures. Ida and Leonard preserved the greatest amount of wild foods and medicines and estimated that eighty-five percent of their diet came from the wild. The other seven preserved more modest amounts of wild foods. Stan, for example, blanched and froze thirty or more bags of nettles and pickled a dozen or more pints of fiddleheads each year. And Eleanor, as mentioned earlier, once canned 148 pint jars of porcini mushrooms.

For the remaining twelve who gathered for food and medicine, eating wild foods was largely seasonal. Gillian believed that fiddleheads should only be eaten in the spring, as a seasonal delicacy, and not frozen or pickled: “I don’t like to eat them any other time.” Gillian’s attunement to the seasonality of food was a relic of her childhood growing up on a rural Michigan farm:

We would eat morels and bread for several days, and that would be it. That would be dinner. And then when strawberries came out, we would eat strawberry shortcake for dinner, and that would be it. For a couple of days. We always did that. It’s farm country, you eat what you’ve got. And that’s a celebration too. And it’s great.

### **Gathering for health**

Gathering contributes to the maintenance of physical and mental health. Eight of the twenty four interviewees specifically mentioned physical exercise as a side benefit of gathering. Four out of five ginseng diggers I spoke with mentioned exercise, which is not surprising given

the remote, rugged terrain where the herb is found. Ginseng digger Dave reported, “You’re in pretty good shape if you go out thirty times a season, I’ll tell you.” Russ used ginseng season as a callisthenic prelude to deer hunting season. And Ralph claimed that his ginseng digging passion helped him remain physically fit.

I do it (digging ginseng) because of my health. I’ve had two heart operations and the last one was triple by-pass. And I was told the more I exercised, the more it would build up the blood vessels in my heart and make it healthier.

Ida and Leonard are fond of invoking Hippocrates famous saying, “your food is your medicine, and your medicine is your food.” Ten of my interviewees mentioned that they valued wild foods because they perceived them to be good for their health. Interviewees described the health benefits of wild edibles in varying ways, including: “good for you,” “good food,” “clean food,” “organic,” “highly nutritious,” “natural,” and “pesticide-free.” Berta believed that the wild mushrooms she ate contained “trace elements” not readily available in “engineered” or “supermarket foods,” and that such elements were important for nutrition and health. Eric said the following of dandelion greens and the chaga (*Inonotus obliquus*) mushroom:

They’re one of these things that I consider essential to health. Really, really extraordinary foods. A lot of wild foods are extraordinary in that way. The chaga that I collect is an immune stimulant and is used by herbalists to make tinctures that are immune-enhancers and build up your system’s stamina.

Conversely, four of my interviewees disputed the notation that wild edibles were inherently healthy. Two stated that health was of no concern to them. When I asked Anthony if he thought there were any health benefits to wild foods, he said, “I don’t think we micro-manage our diet that way.” Two other interviewees took issue with wild foods being cleaner or “more organic” than store-supplied foods, citing issues such as pollution and acid rain.

Twelve interviewees used wild gathered plants for medicinal purposes. Nine mentioned “simples” such as wild mint or wild chamomile teas. Five mentioned using self-produced

tinctures. Berta created her own sedatives from wild lettuce, while Liz swore by the efficacy of a pink-eye remedy made from calendula. Only two of the six ginseng diggers I spoke with used ginseng as a health remedy, although all admitted to having tried the root as a tea.

Fourteen of my respondents reported that spending time outdoors was important to maintaining their mental health. Gathering relieved stress and provided a welcome reprieve from the nine-to-five grind of the quotidian, as elucidated by the following quotes:

Well, it's (gathering) an excuse for booming around in the woods without too much of any complicated demands on my mind (Eric).

It's good for my mind, to get away from people and everything for a while. I think if everybody did that, it would be a better world (Paul).

God, I love coming to the woods because no matter what's going on or what's wrong, when you come to the woods, it goes (Ida).

It's a good stress reliever, that's for sure. You know, working all day in a compromised environment and then going home and getting out in the woods (Anthony).

Well, I think for me, it's (gathering) a huge part of my mental sanity. It's more just an interaction and a commerce with nature than anything... It's just a place where I just shut up my brain. There's no talking, there's no, you know, I still think and obsess, but, you know, your brain's busy, you're busy, your eyes are busy... Whether in all kinds of weather, rain, sunshine. It's just good to be out. That's a huge part of it, it's just being, that's where I feel like I'm a human being (Cormac).

Gary Paul Nabhan (2001) observed that gathering provided a type of “magic” to the practitioner that was uniquely restorative:

There is something primordial about the pursuit of these foods and medicines in their natural habitats. It is an elixir for the soul, this drinking in of the forest and marshland. It is a cure in and of itself, over and above the nutritional or pharmacological value of the plants. (p. 243)

Two of my interviewees reported powerful stories of gathering acting as a tonic. Gillian recalled visiting a friend suffering from breast cancer. The atmosphere was “like a funeral pall”

until she happened to spy some morel mushrooms growing outside: “I started screaming! And that took the pall off. We were out moreling.” Breta’s story was even more gripping:

I was very depressed. You know how teenagers can get, down and down, and I was going to end my life. So I went for a walk, looking down all the time, and all of a sudden, I see a whole bunch of chanterelles. And that saved my life! All of a sudden, I was on top of the world again. Yeah, that’s the way I feel about these God-given, beautiful mushrooms.

The British naturalist, Richard Mabey (2007), wrote a compelling book detailing his battle with depression and how time in nature played a central role in curing his disease. As Mabey (2007) explained, humans have known for millennia that immersion in nature improves mental health:

The idea of a “nature cure” goes back as far as written history. If you expose yourself to the healing currents of the outdoors, the theory goes, your ill-health will be rinsed away. The Romans had a saying, “*solvitur ambulando*,” which means, roughly, “you can work it out by walking,” including your own emotional tangles. The medieval made mass pilgrimages to rustic shrines. John Keats, mortally ill with tuberculosis, fled to the Mediterranean to find that “beaker full of the warm South,” away from that place “where youth grows pale, and spectre-thin, and dies.” “The country, by the gentleness and variety of its landscapes,” wrote the philosopher Michel Foucault, “wins melancholics from their single obsession ‘by taking them away from the places that might revive the memory of their sufferings’”. (p. 223)

The importance of nature to human mental well-being has been a salient topic in the fields of psychology (Kaplan, 1995) and eco-psychology (Roszak, Gomes, & Kanner, 1995), and has also been taken up by sociologists as well (Louv, 2005). However, to date, few NTFP scholars have explicitly linked gathering to mental well-being.

### **Gathering for income**

Many of my interviewees expressed ambivalence about gathering for income. However, two thirds of respondents reported having profited from gathering in some way during their lives. A third of the interviewees stated that they had never sold wild foods or fungi, or otherwise

earned income from gathering or their gathering skills. Half of the interviewees (twelve gatherers) earned income from gathering or from imparting gathering knowledge on an annual basis.

Ida and Leonard earned almost all of their annual income from gathering, supplying six high end restaurants with fungi and fresh greens as well as ten wild food CSA (community supported agriculture) enrollees. In addition to their gathering, Ida and Leonard are paid to speak at conferences and to lead wild food walks that coincide with wild food dinners. The pair also entertains plans to sell wild food handbooks as well as photographs that they have taken of wild edibles.

Penny and Mark both earned a good portion of their income through teaching classes on wild edibles and the preparation of medicines from wild plants. However, neither of them had ever sold wild edibles or tinctures (Penny's former business sold tinctures from cultivated plants). Although Penny and Mark never profited directly from the sale of wild foods or medicines, I still considered wild foods and medicines to be responsible for part of their annual income, if secondarily, due to the transmission of their gathering knowledge.

Four of the five ginseng diggers I interviewed dug and sold root on an annual basis. The fifth dug some wild ginseng as a pastime, but made the majority of his money acting as a ginseng broker. Larry bought lots of wild Vermont ginseng and transported them directly to Hong Kong where he sold them through connections he made on the island in the 1980s. However, the other four ginseng diggers all stressed that money was not the primary reason that they hunted the herb. Two respondents affirmed that one could earn more money working a minimum wage job at McDonald's than hunting ginseng. However, when pressed, each ginseng digger admitted that the cash they earned from ginseng was useful.

I've used a lot of it (ginseng profits) for purchasing appliances for the house. The last big expense I guess was when I went and bought me a dog. Ha! But I use it for that stuff, because we can live without it. But it is, it gives us something if I need a dish washer or a washing machine or a refrigerator, I'll take the money out and go get it. You trade a car, you have to come up with taxes. I can do it, I have it, you know? That's what I use mine for (Dave).

..The money I got from my ginseng... I went out and bought a new snow blower for \$1,500 and that, it just about covered what I had, so that was, you know, I still have the snow blower and it still works fine and that makes a difference, you know (Paul)?

I bought a lot of stuff. I used to pay my property taxes every year (laughs). And, I bought a chainsaw and a TV, stuff like that, you know? My kid bought his first truck with all the ginseng money he saved up over the years. When he was, when he got to be sixteen. Not a new one, but darn near it (Russ).

Lucius, as revealed in the previous chapter, earned two to three thousand dollars a year from the sale of fresh and pickled fiddlehead ferns. Eric roughly calculated that he earned five to ten percent of his income from selling wild mushrooms, fiddlehead ferns, dandelion greens and wild leeks at his weekly farmer's market stand. The income from the spring greens was particularly significant to Eric because Vermont farmers have few items to sell at market in May, which is often planting season. Cormac estimated that he earned between \$800 and \$1,000 a year selling wild mushrooms to local restaurants, which accounted for about two percent of his annual income. Cormac also reported that he traded wild edibles for "free breakfast for the whole family once or twice a week during the summer" with a local restaurant.

Four interviewees earned income from wild edibles at one time in their lives, but no longer sell their finds commercially. Liz sold the excess of some abundant chanterelle mushroom harvests to local restaurants in the past, and once to Balducci's, a well know gourmet food store in New York City. When Stan was a cook in the 1980s, he used some of the mushrooms and edible greens he collected at the restaurant where he was employed, thus indirectly profiting from his gathering Ward sold wild mushrooms, fiddlehead ferns and

medicinal tinctures when he and his wife ran a farmers market stand in the 1990s. When Stewart was just out of college, he bartered wild berries for ice cream, swapped wild mushrooms for free meals at restaurants, and, in the case of some large finds of mushrooms, sold some for cash to chefs. Living on a very low budget at the time, he said of the sales, “It was like pennies from heaven.”

Today, Stewart is very wary of people who attempt to earn a living from the sale of wild edibles, calling the strategy “desperate.” Jeremy never considered selling wild edibles: “I have some Native American heritage in my family and I think for us, it would feel a little bit, I don’t know, not right selling it.” Joseph also disapproved of selling wild foods, particularly porcini mushrooms: “I hate to see people going out and picking them (porcinis) to make money on them.”

Eric, who sold wild greens and mushrooms at his farmers market stand, lamented the “enormous” amounts of money wild edibles command in New York and Boston, and cited a number of instances where had he witnessed rapacious harvesting by profit-oriented gatherers. Ida and Leonard, who make a living from selling wild edibles, also deplored “purveyors” who accumulated large quantities of wild edibles to sell within Vermont as well as to cities along the eastern seaboard. Paul said that those who dug ginseng for the money “don’t last too long,” implying that true ginseng diggers are not motivated by profit or greed. Cormac was also adamant that profit was not a driver in his gathering:

The money is not what it’s about. It’s about discovery and savoring things around me. The money’s just a nice little piece of gravy that comes with it.

In summary, a third of interviewees admitted selling wild edibles or wild medicines at one point in their lives, and half did so annually. Four derived most of their income from wild edibles, two through the sale of edibles, two through the teaching of gathering skills. The

remaining eight who sold wild plants or fungi annually did so as a supplementary income strategy, most earning between one and two thousand dollars a year. Three interviewees were opposed to selling wild edibles and eight expressed reservations about gathering for money, often citing concerns of over-harvest by profit-oriented foragers. Interestingly, the eight who expressed reservations about profit-seeking gatherers all sold wild edibles and/or medicines on an annual basis.

### **Gathering as passion**

Questioning a person about why they engage in a specific activity, especially a spare time activity, often leads to unsatisfying answers. Interviewees are often flummoxed by such questions and unable to locate or articulate the roots of their passion. In Hinrich's (1998) interviews with Vermont sugar makers, respondents often fell back on hackneyed phrases to explain why they sugared, remarking that, "it's something we always did," or, "it's in our blood."

It appears that there is an element of compulsion in pastimes, and that compulsion is often beyond physical or mental control, holding its subjects in thrall. Dave said that he "fell head over heels" into ginseng digging, evoking a popular metaphor for falling in love. Later, he stated, "It's something that I live for, I guess." Stewart said that finding a nice patch of mushrooms, "just sends you," again, a common phrase meaning to fall uncontrollably into love or rapture. Anthony and Jen, upon their first exposure to morel mushrooms, simply said they were "hooked," summoning an image of a fish in a situation beyond its control.

Gillian called gathering "the bug," likening the impulse to gather to a virus or disease one cannot govern. Larry likewise described the desire to hunt ginseng as "getting the bug" and later compared the compulsion to ginseng to a "fever." Russ simply called ginsenging an



“obsession.” Cormac called his gathering both an “infatuation” and an “obsession,” mixing the notions of uncontrollable emotional and mental states. For one third of my interviewees, gathering represented a type of compulsion beyond their ken or control.

### **Gathering as a treasure hunt**

One aspect where gathering differs significantly from gardening involves the element of surprise. This is not to deny that gardens can provide unplanned or serendipitous delights. But gatherers, even when going to their “patches,” never quite know what they will find in the woods. Scouting a new area of woods provides a titillating thrill for many. Two of my interviewees made an analogy between gathering and an “Easter egg hunt,” while two others compared gathering to a “treasure hunt.” Said Breta of gathering:

“It’s almost like an Easter egg hunt,” I say to people. “You don’t know what you are going to find!”

The pay-off of for finding a new patch of mushrooms or ginseng is akin to an endorphin rush. Ralph said of finding a new patch of ginseng:

I guess you would call it a thrill or a high or whatever it is, when you walk into an area where you’ve never been and all you see is waist high plants. It’s a rarity, but it does happen. I’ve had it happen, I think, three times in my life. Oh, yeah, it’s quite a thrill. Because you know you’re the first one that’s ever been there. It’s obvious when you see it...It’s just like anything else in life, your first time with anything – the first big fish you catch or the first nice deer that you shoot. It’s a, I guess today, they would say, “it’s a rush.” Ha!

Other interviewees reported similar feelings when discovering an unexpected windfall in the woods. Paul described finding a new ginseng patch as both “a high” and “a really good feeling.” When I asked interviewees about one of their favorite gathering trips, their responses inevitably fell into two themes. One theme involved a good day with family or friends in the woods. The second theme involved a great discovery – a large ginseng plant or huge ginseng patch, a “yellow-brick road” of chanterelles, or dozens of morels. A chance encounter after my

interview with Cormac only re-enforced the “treasure hunt” element that drives many a gatherer. Cormac introduced me to a friend and told him of my research topic. The man immediately beamed and related:

“Mushrooms! Oh, man, morels! When I find one I literally scream. I can’t help myself. I get so excited, I scream!”

### **Gathering as a temporal and spatial anchor**

Gatherers mentioned several intangible benefits of gathering that are worthy of note. This section relates some of the unquantifiable benefits that gatherers reported. Of particular note is the notion of gathering as a temporal and spatial anchor.

Gathering is a temporally-bound activity enacted in close harmony with the passing seasons. Gatherers are highly attuned to the scheduled emergence of plants and fungi and plan their gathering year accordingly. Stewart’s quote illustrates how he anticipates mushroom emergence each year, even in the face of what he terms “wacky” weather:

But even though it’s been wacky, I’ve found *Gyrometria esculenta* exactly at the same time that I always find it. I’ve found morels at exactly the time that I usually find them. *Polyporous squamosas* were up just right on schedule. So I’m guessing, though I have no way of proving it, that when the chanterelles come, they’ll probably be right on schedule too.

Nancy and the Italian porcini gatherers of central Vermont would anxiously await the first warm rains of mid-August and the rising of “the mushroom moon.” The long Vermont winters give rise to anticipation of the first spring greens for Jeremy and Penny. Eating seasonally fresh wild edibles is a way to for gatherers to mark and celebrate each season. It is no accident that scholars and writer/chefs also link gathering to the seasons. For example, Emery (1998) had her interviewees create “gatherer wheels,” circular depictions of their harvests with products gathered listed within each seasonal quadrant. And Green and Scott (2010) divide their wild edibles cookbook into seasonal sections.

Gathering also instills place attachment. When my interviewees spoke of areas where they gathered, they invariably used the possessive, describing areas as “my beds,” “my patches,” or “my spots.” When gathering areas are lost to development or logging, interviewees expressed a sense of loss and sadness. Because gathering involves obtaining sustenance from a particular area, the gatherer imbues the site with fondness and meaning. Not surprisingly, Alexander’s (2008) research demonstrates that landscapes which provide residents with sustenance (which she defines as four separate pieces, including food, energy, livelihood, and security) tend to promote feelings of place attachment.

Respondents reported great fondness for the Vermont landscape and particular “patches.” Dave, a ginseng digger, spent his winter evenings poring over topographical maps, making lists of new areas to scout in the coming year. Cormac was particularly vivid in his description of how gathering anchored him to his place in the world:

I’m also just obsessed with the landscape around me. I’m always learning. It’s another good part of it. A good trip would be going to places you know and venturing off into little areas that you didn’t check before and maybe finding a new patch. And just getting a better sense of everything around me. In my head, I can visualize almost every square foot of the surrounding circumference of a mile. You know, pretty much. I know it pretty solidly. Except for those little patches that might be on the edges of posted land or something. I know it really well. It’s really satisfying to know something that well. And then be able to go to Google Earth and I look at these areas and, “Yep, been there, been there, been there, been there, been there.” You know, kind of put your little markers there.

### **Gathering as a learning activity**

Leonard, raised in what he calls the “vanishing mountain tradition,” values his time in the woods because, as he avows, “You are always out there learning - I’m constantly learning, all the time.” Gatherers take a great deal of pride in learning their plants, trees, fungi and habitat. As Larry related, flexing ones intellectual muscles while gathering is highly rewarding:

The reward is not the monetary reward of finding ginseng, the reward is the reward of, well, it's a spiritual reward, but it's also an intellectual reward, because one has to learn where ginseng grows, one has to be able to read the woods, and by that I mean the cycle of the woods; what that land that you are on had been, and what it will be. And then the orienteering skills of getting from A to B in the woods, and then back to A. So it's a wonderful adventure.

Being able to locate patches of ginseng or mushrooms year after year without getting lost in the woods is a source of pride for gatherers. Leonard describes himself as, "a GPS, basically." Similarly, Cormac relates that when he finds a fecund new patch of mushrooms, "I kind of log it in my own internal GPS sensor and come back to it." Russ keeps track of over 400 ginseng sites in a Vermont atlas. Ida and Leonard evince a particular pride in their gathering skills. When I used the term gathering in my interview, they corrected me and insisted that what they were doing was wild-crafting – an art form rather than a mere activity.

Three of the ginseng diggers I interviewed kept meticulous log books of sites visited, number of plants dug, and other habitat notes. Paul recorded slope, elevation, soil type and the weight of roots dug green, and later, dried. His record-keeping was "just for (his) own knowledge," but was an attempt to see if different soils and habitats produced different quality ginseng roots:

And one thing I've learned, which isn't surprising, is that the older root don't dry out as much as the smaller stuff. And there's something else, which, I'm sure it has to do with the soils, that, you know, some roots, some lots will, the same sized roots will, it might take three-and-a-half or four green pounds to make one dried pound, but then another lot, it's, like, less than three, you know? And there's something there, something going on. I think it's something in the soils. There must be some mineral or something. But it's just for my knowledge, you know. I write down if I saw deer sign or turkey sign too.

Dave describes learning about ginseng habitat and ginseng companion plants in the following way:

Once we got into the woods, we would look for a hardwood ridge. And we would look facing east. Because you have to stop and think. It took me a while, too. The east side, facing the east, is always hardwood. And the west side is always

softwood. You have to stop and think about it for a while. But that's the way the glaciers left it. You get oak and birches growing on the sour soil. But you get onto the east side, it's the sweet soil – loam. And I look for a maple ridge. And I like to see a few butternuts in the ridge. Oh, ash, cherry, even yellow birch. I don't go into white birch. Basically, I love butternut and maple... But it don't do too good in fir. You'll find some in fir. I like the open hardwood ridges. And I look for maidenhair ferns - that is a good one. And doll's eye. I always see a doll's eye and look around, and many times I'll see a ginseng plant within a few feet of that.

Like Leonard, Cormac feels that gathering is a life-long education, a process that is often humbling:

It's a constantly humbling experience, being out in the woods, because there's just never enough that I can identify and learn. I just constantly need to learn more. I'm always being proven wrong, for some silly assumption that I've made about a specific habitat of one specific plant, for example. I'm proven wrong all the time. The same thing going fishing. You'll think, "there's gonna be a trout in that hole," you know, and I'll have my line dangling by my feet, and a trout will bite right by my feet. That's the kind of thing that I like about being out in the woods, is that it is challenging my assumptions. It's also constantly invigorating renewed areas of interest. There's just so many species I don't know. And so many things I want to know, whether it's birds or mushrooms or trees or fungus or ferns or sedge grass.

Much of the knowledge my respondents valued was practical or empirical, but several individuals enjoyed reading scientific and theoretical papers as well. Eric, for example, revealed in the complicated lives of fungi:

There's mycology and there's, you know, foraging. And I'm not a mycologist... The details of the lives of mushrooms - of course, they're not - people think of them as plants, but they are not. They bear much closer similarity to animals in their DNA than plants, so they're actually closer. And when you find out about their sex lives, you realize what incredible, complicated beings they are and how closely they are associated with the health of advanced plants and animals. They really are connected with the ecological health of the planet in ways that are not all that evident to cursory examination.

Wonder and thirst for knowledge go hand-in-glove for gatherers. Jeremy wonders how humans figured out that boiling fiddleheads twice makes the ferns edible. Stan delights in

finding jewel weed growing in proximity to stinging nettles, as the liquid from the stalk of the first plant is an antidote to the sting caused by the second plant.

Imparting gathering knowledge is central to Penny and Mark's way of life as instructors. For Jeremy and Stan, imparting their gathering knowledge to their children is a fun and constructive way to foster a love of the outdoors through experiential learning. Stewart will gladly confirm a mushroom identification to those who bring him specimens at the local library where he works. And the impulse to share gathering bounty can be construed as a type of knowledge-sharing with family and friends as well.

### **Gathering as a transformational activity**

Several gatherers mentioned entering a different mental state while gathering. The most common comparison among interviewees was that gathering made them feel like a "kid" again. Larry said that hunting ginseng was "wonderfully childish," and compared the activity to "being a kid again on a treasure hunt." Stewart simply stated, "We get to be kids again." Children have an innate sense for gathering (Chipeniuk, 1995; Stanley, 2010). But referencing the feeling of being a child also implies that the act of gathering provides a temporary refuge from the adult world, with its stresses and norms.

For Eric, gathering requires a mental state that is completely different from his day-to-day mindset:

You know, it takes a perspicacious eye to forage. You really, you've got to be able to look intensely at landscapes. You can't afford to be inspecting every inch of ground. You have to do what, I guess would be, take the hunter's stance in things. You need to glance over a landscape and your eye is not looking for shapes, but spots of color, or confirmation, or, and, and when you identify that, you don't look at the thing, your vision is kind of a wide-angle vision. When you are harvesting wild berries, your fingers need eyes. You know, you pick, and your eyes are already - it's hard to describe, but your fingers need to move faster than you can, than if your eye is following. And it's something, one of the reasons why things like beans and peas are vanishing from the repertoire of

growers is that it's just, unless you have third world pickers, it's really hard to find speedy pickers. It's a lost talent. Because it's, to develop that kind of hunting skill, um, almost, you have to be forced by necessity. It's not an easy stance to take with respect to things. It's not a usual one. It almost requires a certain attention-deficit disorder. I think a lot of children who get diagnosed with that in school are actually hunter-gatherers who would be perfectly at home foraging and hunting, but there's just no opportunity for them to exercise what should be their prime asset. Their ability to pick out shapes and movement in the landscape.

One of my other interviewees, Stewart, also mentioned that, "I'm a little bit A.D.D." The reference to attention-deficit disorder in this quote and the quote above is interesting, because it is a theme that occasionally arises in the gathering literature. Les Jardins Sauvage is a famed restaurant in Quebec which serves entire meals created from wild ingredients. The restaurant's chef, Nancy Hinton, describes Francois Brouillard, her partner and the gatherer who supplies the restaurant, as having, "A.D.D., not that he knows it (Jacobsen, 2010, p. 127)." Similarly, Conniff (2011) describes famed New England gatherer Eric Strusinski's field methods as, "testimony to the hidden powers of attention-deficit disorder" (p. 102).

In sociologist Gary Alan Fine's (1998) study of mushroom hunters, *Morel Tales*, Fine notes a tendency amongst mycophiles to characterize themselves as odd outsiders. One could dismiss the above quotes as mushroom gatherers exhibiting eccentricity by painting themselves as being prone to attention-deficit disorder. However, recent research suggests that genes associated with attention-deficit hyperactivity disorder (ADHD) were once positively selected for in human evolution because they conveyed an evolutionary advantage, specifically with regard to hunting and gathering (Eisenberg & Campbell, 2011). Furthermore, current nomadic populations that still hunt and gather exhibit higher frequencies of the genes associated with ADHD than contemporary sedentary populations (Eisenberg & Campbell, 2011). These findings

suggest that gathering requires a different mental state than used in everyday modern life and has interesting implications for the education of children exhibiting ADHD.

Attention-deficit disorder was not the only example of a change in mental state brought on by gathering. Two respondents reported feeling like animals during their gathering, as if the activity presented an opportunity to temporarily slough off their human identity. Jeremy said that when he gathered, he “felt like a bear in the woods.” Gillian felt more like a cat when gathering:

The whole hunting instinct comes in. When you are hunting morels, you remind yourself of a cat, you know, trapping the mouse. It’s great intensity. Your whole being is taken over in the pleasure, the passion, of the hunt. That is if you are finding them!

In *The Omnivore’s Dilemma*, food writer Michael Pollan (2006) discusses a similar focusing phenomenon that he experienced when hunting morel mushrooms. “You have to *get your eyes on* (emphasis in the original text),” writes Pollan (2006, p. 368). Finding morels is difficult and requires sustained concentration and an acute visual attunement that finally allows the mushrooms to “pop” when looking at the landscape. Pollan (2006) described his mushroom hunting in terms that could apply to a type of trance:

My gaze locked on a point about six steps in front of me, I’d completely lose track of my location in space and time. In this, mushroom hunting felt like a form of meditation, the morel serving as a kind of visual mantra shutting out almost every other thought. (p. 384)

Vermont herbalist Adele Dawson (1986) likewise compared gathering to meditation: “Gathering food is a type, a homespun American type, of walking meditation” (p. 20).

To summarize, interviewees reported that gathering relieved stress, focused attention, and, occasionally, induced a transformation in their mental state. These characteristics, in combination, suggest that gathering is a “flow” activity. Psychologist Mihaly Csikszentmihalyi



(1997) coined the term “flow” to describe experiences where people become totally immersed in an activity to such a degree that outside anxieties and distractions fall away. Writes

Csikszentmihalyi (1997):

The metaphor “flow” is one that many people have used to describe the sense of effortless action they feel in moments that stand out as the best in their lives. Athletes refer to it as “being in the zone,” religious mystics as being in “ecstasy,” artists and musicians as aesthetic rapture. (p. 29)

Some of the quotes above, such as Russ relating his ability to spot the subtle shade of ginseng’s yellow fall foliage in the woods, demonstrate a keen attunement, a moment of entering the flow state. Gillian, a well-read writer, was obviously familiar with the concept of “flow” and used the term to describe what she sometimes felt when gathering:

You know how people feel when they are hunting a deer or another person? It’s total focus. It’s, what’s the word, when you are like, you sometimes get it when you are writing too? You are in total flow with those morels. The flow state.

Flow, as Csikszentmihalyi (1997) explains, is often experienced when a person is engaged in a favorite activity such as gardening, skiing, singing, mountain climbing, or cooking. Passive leisure activities, such as watching television or relaxing, often fail to relieve stress because they do not demand full attention and thereby give room for distracting thoughts to intrude or dominate. By contrast, flow activities relieve stress because they demand focused attention, provide challenges, and have clear rewards. In gathering, the challenge is to fine-tune visual acuity to single out the sought species in the correct habitat. The reward is a purposeful time spent in the woods and, perhaps, something good to eat as well. Gatherers who achieve the flow state experience a transformation in mental state while also reaping mental health benefits, specifically the reduction of stress.

## **Gathering as a means of maintaining identity**

In her research on Appalachian ginseng diggers, Hufford (1997) interviewed a man who stated: “I work in construction, but really I consider myself a ginsenger” (p. 14). I was hoping that my research would uncover similar ties between gathering and identity, but I only recorded two quotes that spoke to identity. Dave described ginseng digging as “something he lived for.” Leonard, who had dug ginseng from his childhood but had stopped doing so in the last decade, also felt that gathering defined him as a person. Leonard and his partner Ida speak below about Leonard convalescing from a recent injury and digging ginseng for the first time in years:

Ida: I want to add something here about him and ginseng. Since he got hit on the head, and has gotten confused, I dare say, it has to be kind of frightening. When we were out with Chio... (Leonard interrupts).

Leonard: I dug two pieces of ginseng.

Ida: He dug two pieces of ginseng. And she said, what are you going to do with it? Are you going to use it, are you going to sell it? And he said, no, he just needed to dig it. He needed to know that was still... (Leonard interrupts again).

Leonard: Well, I was in an area where I had planted a lot of ginseng, back years ago...

Ida: But it is still a touchstone.

Leonard. Yeah. It's part of my life, no doubt about that.

I suspect that identity is a difficult subject for interviewees to bring up naturally. The idea of identity may only come to light after multiple interviews over time. The theme intrigues me, because my interviews suggest that gathering may play a significant role in self-identity. However, in their conversations, my interviewees made few explicit quotes linking gathering to identity. This is not surprising as identity is usually not a subject one discusses, particularly with strangers during a formal interview.

## **Factors contributing to the maintenance or decline of gathering practices in Vermont**

To this point, I have discussed interviewee's reasons for gathering, which ranged from tangible (gathering as a source of food, medicine, or cash) to intangible benefits (gathering as a temporal and spatial anchor, gathering as a lifelong learning endeavor, gathering as a mentally transformative activity). In this final section, I briefly touch on reasons interviewees gave for the maintenance, or diminishment, of their own personal gathering practices. It is not enough to understand why interviewees enjoy gathering. It is also important to elucidate what factors in their personal lives, and what factors in the broader social and political landscape, permit or limit their ability to gather. Interviewees reported a number of real and perceived factors that supported or curtailed their ability to gather. Some of the conditions that enable gathering are found elsewhere in the country, or anywhere in the world for that matter, while others are more distinctive to the northeastern US. The same is true of reported impediments to gathering.

### **Time.**

Gathering is a time-consuming activity. Many people do not have time to gather due to family and work obligations. As mentioned in the profiles, Dave only began to collect ginseng in earnest after his retirement from work. Lucius returned to farming and gathering only after he had lost his job. Stewart was able to gather because of his untraditional work schedule; his weekly schedule includes one work day at the library and one work day at the radio station, supplemented by music playing on odd days and evenings. Likewise, Cormac, a musician and music producer, and Gillian, a writer, both cited their "flexible schedules" as key to their ability to gather.

Liz gathered more when she was younger and lived on a commune where "time meant nothing" and living expenses were shared. Now older and the single head of a household, she

currently has little time to gather. Stan and Jeremy both stated that they presently had less available free time to gather because of their young children.

### **Fitness.**

Time exacts a physical toll on the body, which in turn results in a diminished ability to gather. Nancy and Joseph no longer gather due to physical infirmities brought on by old age. Gillian, Berta, Dave and Ralph also listed a variety of knee, hip, leg and heart ailments, respectively, that have restricted their gathering abilities.

### **Access.**

Access to land is critical to maintaining gathering practices. In 18<sup>th</sup> and 19<sup>th</sup> century New England and New York, as well as in parts of the postbellum South, forests and grazing lands were treated as commons, although local populations would often implement their own measures to restrict access to resources by outsiders (Hahn, 1982; Judd, 1997; Jacoby, 2001). The perception of undeveloped lands as a commons persists in Vermont as well as other pockets of North America today, and this unspoken but assumed concept facilitates the maintenance of gathering practices.

The concept of the commons has been crucial to maintaining gathering practices in Europe. The right to gather wild resources such as mushrooms and berries for personal consumption is protected by customary law in the Czech Republic (Olmos, 1999), Denmark, and the Baltic States (Saastamoinen, 1999). In the Scandinavia, Everyman's Law, known as *Allemansrätten* in Sweden, *Allemannsretten* in Norway and *Jokamiehenoikeudet* in Finland, enshrines public access to private lands for recreational activities such as hiking, camping, skiing and gathering for personal use (Richards & Saastamoinen, 2010). Not surprisingly, some of Karl Marx's earliest articles for the *Rheinische Zeitung* attacked the imposition of wood theft laws.

The German wood theft laws banned peasant access to forestlands traditionally used as commons for the collection of firewood, thereby curtailing use of key subsistence resources (McLellan, 2006).

Bee lining was a traditional activity in rural Vermont that is indicative of a commons mentality. Two of my interviewees, Russ and Leonard, independently and without prompting, broached the topic of bee lining. Bee lining involved catching wild honey bees, carrying them some distance, and then releasing them. When this capture-and-release process was repeated enough times, a skilled person could triangulate the location of a bee hive from the flight lines of the escaping bees.

As Russ related, “I think it’s still on the books. If you find a wild honey bee tree, you put your initials on it, and that’s yours, even if it’s on somebody else’s land.” Leonard related a similar story about the legality of taking bees and honey from another’s land, stating that it was law in Vermont. There was a court case in Vermont in 1870 (Adams v. Burton, 43 Vt. 36) involving a dispute over a wild bee hive. The judge ruled in favor of the finder of the wild bees, but only because the landowner had relinquished claim to the find (the dispute involved the finder of the bees and a relative of the landowner). The erroneous perception amongst many old-timers that wild honey and bee’s nests are a “finders, keepers” resource regardless of ownership is testament to a still widely-held view that much of the remaining undeveloped land in Vermont is still part of the commons. Dahlberg (2011) notes that public right of access in Sweden (*Allemansrätten*) is a cultural symbol and a cornerstone of Swedish identity. For older Vermonters, the concept of the commons is a similar cultural touchstone which symbolizes not only a tie to the land, but a way of living on the land as well.

Interviewees who were long-time residents of the state made a number of statements that indicated the concept of the commons is entrenched:

The right of free passage was one of the assumed aspects about hunting and gathering and, in my past, I mean, when I was growing up, and I'm not that ancient, I mean, I'm fifty-seven, but when I was growing up, if you wanted to collect mushrooms or pick berries or go on a neighbor's farm, you didn't, no one ever thought to say, "Well, is it okay?" I mean, it, it just didn't enter anybody's head that we owned land to the exclusion of the passage of other people. And that has of course completely done a one-eighty, to the point where, now, when people own land here in Vermont, they regard it as some sort of exclusion domain where they are entitled to prevent any entry by anyone else (Eric).

Ginsenging is like deer hunting. You hunt on several peoples' land. You don't even know whose land you are on after a good day's walk (Dave).

Vermont used to belong to everybody back then. You could go anywhere you liked. Nobody ever kicked you out of anywhere. You weren't going to do any harm picking mushrooms (Joseph).

One of the greatest threats to access and to the concept of the commons in Vermont is posting. Between 1971 and 2011, the amount of posted land in the state more than doubled, from 100,000 acres to 230,000 acres (Whitcomb, 2012). These numbers reflect acres of land officially enrolled at town clerk offices; many other parcels in the state may be more informally posted with no trespassing signs. The Vermont Constitution allows licensed hunters and anglers access to property unless the property is posted, but is mute on the issue of gathering. Vermont residents typically blame new home owners from out of state for the rise in the amount of posted land (Whitcomb, 2012). Posting is on the increase in Maine as well (Acheson, 2006), indicating that access may be a looming issue in the New England region where private land ownership is the dominant tenure type.

### **Camp.**

Five of my respondents (more than 20% of the total) mentioned that they gathered wild plants or mushrooms while at "camp." In Vermont, the word "camp" is traditionally associated

with deer hunting, but it can also mean a summer get-away. The lure of camp, as Miller (1992, pp. 16-17) relates in his stark photographic homage to deer camps in Vermont, embodies a yearning to step away from everyday routines and spend time with nature, family and friends:

Why do men go to such great efforts to build a hunting camp instead of merely hunting from their homes? When I was growing up in Coventry (VT), in the 1950s, most of the kids in town had “camps.” A camp was any place away from one’s house and one’s parents; the distance did not have to be great... This youthful desire to go into the woods and build a camp away from one’s home, to pass secrets and share intimately with one’s friends while enjoying the changes of the seasons, must have been carried from childhood by some of these hunters. Returning annually has become a ritual, a recreation of their childhood memories and experiences. I am here for similar reasons: to enjoy companionship in a place and time removed from the everyday, repetitive monotony of home, with its responsibilities and stress.

Stewart recalled gathering berries at his parent’s camp as a child. Dave hunted ginseng, and, later in the fall, deer, from his camp in eastern Vermont. Jeremy’s days at camp were spent fishing and collecting fiddlehead ferns, while Liz and Nancy collected mushrooms at their respective camps. Pouta et al.’s (2006) study of recreational berry pickers in Finland found a positive correlation between maintenance of a “rural lifestyle” – including activities such as berry picking – and ownership of summer cottages. A similar dynamic is likely at play in Vermont, where camps appear to promote ongoing interactions between humans and nature, including hunting and gathering.

### **Land management practices.**

Land management practices, such as logging operations or road building, can greatly impact gatherers by changing the biophysical elements of the landscape (Ginger et al., 2012). Half of the interviewees described losing access to favorite gathering areas due to development for roads and housing. Forestry practices also impact habitat and the ability to gather. Ida and Leonard were devastated when they visited one of their favorite old-growth forests to pick

mushrooms and found that it had been clear cut. Russ said that he would rather see more selective logging than clear cut logging, because he claimed that clear cutting allowed too much sunlight over a period of several years, effectively hindering any chances of ginseng re-generation: “That woods may grow back in another hundred years to maple, but there won’t be any ginseng in there.”

Conversely, Paul and another ginseng digger I met at the annual ginseng auction, disputed the contention that logging harmed ginseng for the long term. Said Paul: “Logging disrupts things to begin with, and a lot of ginseng is destroyed in the logging process, but, I think, it preserves it in a way, too. It (the ginseng) will grow back under the briars.” Joseph and Nancy claimed that much of the porcini habitat they used to hunt was lost to development or logging, a contention supported by commercial gatherers Ida and Leonard. Gatherers of berries had fewer concerns with logging because such operations opened new habitat for briars. Similarly, gatherers who collected open-grown species such as milkweed expressed fewer concerns about logging.

### **Technology.**

Jen is happy that her husband Anthony now carries a cell phone with him whenever he gathers, just in case he should ever “get into trouble,” i.e., fall and injure himself or twist an ankle and be unable to walk out of the woods. Dave bought a GPS unit after getting lost in the woods during one of his ginseng forays. Ida and Leonard occasionally use GPS units and walkie-talkies in the woods to ensure that they don’t get separated too far from each other. However, none of the gatherers I spoke with use GPS units to mark and locate patches of wild edibles or use cell phone applications to identify plants or mushrooms.



While some gatherers are availing themselves of technology to make gathering safer and more convenient, there is also a perception amongst some gatherers that technology is precipitating a decline in the practice. Dan, Dave, Nancy, Russ and Stewart all mentioned television, video games and computers as likely culprits for why fewer young Vermonters show any interest in gathering. This perception is congruent with Louv's (2005) contention that of much of the blame for American youngsters' divorce from nature is due to the powerful draw of technology in the form computers, television, and cell phones.

### **Summary**

In this chapter, I have attempted to elucidate why Vermonters gather wild edibles and medicines by using their own words and citing relevant supporting literature when appropriate. Despite the diverse backgrounds of my interviewees, the data show many remarkable similarities of experience and parallel reasons for gathering. Past research into gatherers has often focused on one aspect of the gathering experience, e.g., livelihood, recreation, or regulations, to the detriment of a more holistic analysis. In particular, the emotional freight that gatherers feel about their activities has been given short shrift. This small set of interviews shows that gathering is important to maintaining the mental health and well-being of its practitioners. Gathering is also an important social activity for many. Like gardening, gathering fosters a deep, abiding attachment to nature. It is also an activity that anchors people temporally and spatially, fostering attachment to place.

## Chapter 7: A Bourdieusian analysis of gathering practices in Vermont

What interests Bourdieu is the genesis, “the mode of generation of practices;” not, as in Foucault what they produce, but what produces them.

Michael de Certeau, *The Practice of Everyday Life*

### Introduction

In the previous chapter, I addressed the first two of my three research questions, namely, why do people in Vermont gather and what factors maintain or erode gathering practices? Interviews revealed many shared reasons for gathering amongst the respondents, including enjoyment of nature and spending time with family or friends. While gatherers from different backgrounds professed similar inclinations to gather, they also exhibited nuanced difference in their practices, particularly with respect to their views of nature and the gathered products themselves. In this chapter, I tackle my third research question: are there differences in gathering practices in Vermont, and if so, how do they differ? I analyze the differences in gathering practices by drawing on the works of sociologist Pierre Bourdieu, specifically his concepts of practice and distinction. First, I provide a very brief overview of the main concepts of Bourdieu’s work. I then apply these concepts to my data to illustrate differences in gathering practices.

### Bourdieu: An overview

French sociologist Pierre Bourdieu (1990) wrote, “Of all the oppositions that artificially divide social science, the most fundamental, and the most ruinous, is the one that is set up between subjectivism and objectivism” (p. 25). Bourdieu (1989) declared, “the most steadfast (and, in my eyes, the most important) intention guiding my work has been to overcome it” (p. 15). To overcome the limitations of the subjectivist/objectivist antimony, Bourdieu proposed a theory of practice. The central pillars of Bourdieu’s theory of practice include *habitus* (personal

dispositions), *field* (social arenas), and *capital* (resources), which he formulated (Bourdieu, 1984, p. 101) into the following equation: “[*habitus* (*capital*)] + field = practice” (p. 101). That is, practices are ways of operating in the world and are the product of subjective individuals (the *habitus*) using and competing for capital within structured, objective, social arenas (fields).

### **Habitus.**

The *habitus*, notes Thompson (1991), is, “a set of dispositions which incline agents to act and react in certain ways” (p. 12). Bourdieu (1990) defines *habitus* as:

The conditionings associated with a particular class of conditions of existence produce *habitus*, systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes with presupposing a conscious aiming at ends or an express mastery of the operations necessary in order to attain them. Objectively ‘regulated’ and ‘regular’ without being in any way the product of obedience to rules, they can be collectively orchestrated without being the product of the organizing action of a conductor. (p. 53)

The *habitus* is, according to Wacquant (2005), “the way society becomes deposited in persons in the form of lasting dispositions, or trained capacities and structured propensities to think, feel and act in determinant ways, which then guide them” (p. 316). These dispositions – values, tastes, perceptions, and feelings - are inculcated from a young age through exposure to family, school, church and other social institutions. This includes everyday household acculturation, such as “cover your mouth when coughing,” or, “close your mouth when chewing food,” - injunctions which are in turn subtly reinforced by parental intonation, or looks of disapproval (Bourdieu, 1991) – as well as exposure to broader issues including money, politics, or the role of the sexes. Through listening and observing, a child “internalizes ‘proper’ ways of looking at the world, ways of moving (bodily habits), and ways of acting (Reed-Danahay, 2005).” *Habitus* is largely internal, but it is also externalized in physical ways, such as one’s

accent, speech patterns, ways of walking and other bodily comportment. Habitus most often refers to the dispositions of an individual, but certain classes of individuals may also be said to share a habitus. Because the habitus is acquired at a young age, it functions almost unconsciously. As Bourdieu (1990) notes, the habitus is, “embodied history, internalized as a second nature and forgotten as history” (p. 56).

The habitus tends to reflect social class. Individuals from the working classes consequently exhibit different dispositions, and physical comportment, than agents raised by the elite. Agents accordingly adjust their expectations for future success or failure not like a gambler, “organizing his stakes on the basis of perfect information about his chances of winning,” (Bourdieu, 1990, p. 54) but rather like agents predisposed to act according to what is deemed probable and permissible. Thus individuals, “become the accomplices of the processes that tend to make the probable a reality” (Bourdieu, 1990, p. 65).” That is, the habitus excludes certain practices as improbable or unthinkable, or “not for the likes of us” (Bourdieu, 1990, p. 56). Hence a working-class child would exclude, out-of-hand, the idea of becoming a classical concert pianist. In sum, the habitus is, in Bourdieu’s (1990) words, the agent’s “feel for the game” (p. 66), i.e., the agent’s subjective dispositions and history, their practical sense, which is brought to bear in everyday life.

### **Capital.**

“Capital,” according to Bourdieu (1986), “is accumulated labor...which when appropriated on a private, i.e., exclusive basis by agents or groups of agents, enables them to appropriate social energy in the form of reified or living labor” (p. 241). The ways in which forms of capital are distributed governs the structures of the social world, and an individual’s

access to capital determines the, “chances of success of practices” (Bourdieu, 1986, p. 242).

Bourdieu (1986) identifies four types of capital:

- 1) Economic capital is money or goods that can be converted into money (e.g., property).
- 2) Cultural capital is cultural taste, and is predicated on access to the arts (e.g., music, books, instruments) or to education (which can be further sanctioned by educational degrees).
- 3) Social capital describes an agent’s social network and social obligations.
- 4) Symbolic capital is prestige, a title, reputation, or general presumed competence.

Symbolic capital has no meaning in and of itself, because it is a perception; but once a group agrees to recognize and consecrate symbolic capital, it becomes a type of, in Bourdieu’s words (1998), “magical power” (p. 102).

Individuals struggle to acquire or maintain capital within fields. Yet capital is not uniform from field to field. For example, an advanced degree in mathematics would be a highly valued form of cultural capital in the fields of physics, aero-space technology, or energy but would have little to no value in the field of sports or politics. An individual may also transform capital within a field. This happens when a consultant, to use an example, uses cultural capital (a specialized educational degree) and social capital (social networks to win work contracts or arrange meetings with important individuals) to build a sterling reputation (symbolic capital).

### **Field.**

For Bourdieu, a field is, to extend the game metaphor introduced above, the pitch upon which the game is played. Fields are social spaces with their own structures and rules (doxa); for

example, the field of sports, the field of academia, the field of medicine, or the field of economics. Bourdieu (1998) defines field as:

..A field of forces, whose necessity is imposed on agents who are engaged in it, and as a field of struggles within which agents confront each other, with differentiated means and ends according to their position in the structure of the field of forces, thus contributing to conserving or transforming its structure. (p. 32)

Fields are not static, but rather ever-evolving due to internal struggles over capital as well as intersections with other fields (for example, the field of business can change dynamics in the field of environmentalism by maintaining or curtailing practices, or by donating money toward certain causes). The interrelation between the habitus and field is what creates practices.

### **Distinction.**

Bourdieu's 1984 publication *Distinction: A Social Critique of the Judgment of Taste* is an exploration of personal preferences and aesthetics. The work is based on 1,217 surveys of Parisians regarding their education levels and tastes in cultural matters including music, food, art, leisure activities, fashion, and literature. The research shows how aesthetics and cultural consumption, "fulfill a social function of legitimating social differences" (Bourdieu, 1984, p. 7). Bourdieu posits that the elite classes use capital to elevate certain practices and tastes above other practices and tastes, thereby distinguishing the cultured from the vulgar. As such, a five course meal with its varying dishware, utensils and order of presentation becomes superior to a one-pot peasant meal due to its formalism of presentation. Likewise, abstract art or modern fashion is consumed more readily by the upper classes than the lower classes because the upper classes possess the cultural capital (in the form of art history education, for example) necessary to appreciate them. For Bourdieu, an aesthetic outlook, or taste, not only signifies upper-class prestige, it is also an instrument of social domination.

## **Rurals and Neos**

As I began to analyze my data, I was struck by the differences in how interviewees viewed nature and wild-gathered plants and fungi. Often, these differences appeared to strongly correlate with where an interviewee was raised. I divided the interviewees into two groups, one raised on farms or in rural areas (whom I will henceforth refer to as “Rurals”), the other composed of interviewees from urban and suburban backgrounds (a group I will call “Neos,” – in homage to Willis & Campbell [2004], who used the term to designate ex-urban rural immigrants in France).

There were thirteen Rurals. Of the thirteen, eight (Cormac, Ward, Lucius, Leonard, Gillian, Ralph, Nancy and Dave) grew up on farms (see Table 3). Three others spent a great deal of time on farms. Eric spent much of his childhood working on his grandfather’s farm, a farm he later re-habilitated in the 1970s and still works today. Paul and Russ grew up close to farms and worked as farmhands in their youth. Peter was raised in a rural community dotted by farms and Italian immigrant households with large home garden plots. Ida was raised on a remote reservation in Wyoming. In addition to Ida, Gillian was the only other member of the Rurals to grow up outside of Vermont (she hailed from a farm in Michigan).

Vermont is still a rural state, but the agricultural sector was already in decline in the 1930s and 1940s when many of the older Rurals were children. Only two of the Rurals continued to farm as a profession in their adulthood, and for one, Lucius, farming was a fall-back job after losing his regular work. Despite the decline of farming as a sector in Vermont, the experience of growing up on a farm imparted a very particular habitus to the Rurals, one which is quite distinct from the habitus of the Neos. For example, many Rurals, particularly those who grew up in the years after the Great Depression, mentioned deprivation or need:

It was farm country. Real poor. Real poor. (Dave)

We didn't have a whole lot of money. (Ralph)

We were a poor family surviving with what we had. (Nancy)

During one interview, when I asked a Rural interviewee if today's young farmers, some of whom are first time farmers from urban and peri-urban areas, are any different from the farmers of his generation, he suddenly burst into tears. I quickly turned off my recording device and allowed the man some time to recover. I apologized for any awkwardness that I may have inadvertently caused. When the man finally composed himself, he stuttered:

They - I'd have to say that they don't know what we went through. Not that we knew it as a hardship at the time, but it was hard, real hard. We didn't know we were poor, we were just raised that way, and that's just what we did.

Such circumstances were not limited to Vermont. Kalish's (2007) description of growing up on a farm in Iowa during the Great Depression was eerily similar to descriptions of farm life given by interviewees Leonard, Ralph, Lucius, Nancy and Dave:

Grandma and Grandpa were what the locals called "land-poor" – people who owned a lot of land but had very little money. And even what little they had they tried to save. The only things they spent money on were tea, coffee, sugar, salt, white flour, cloth, and kerosene. (p. 14)

The lack of economic capital on rural farms made thrift and hard work bedrock virtues of an agrarian habitus. As Lucius stated, farm-born people did not, "go to the store and buy and buy and buy." Leonard's father, for example, saved money, sometimes for years, to buy goods because, as Leonard said, "he didn't believe in credit." Hard work was a necessity. Again, such circumstances were not unique to Vermont. Funnell's (2008) study of young males in rural Australia found that demonstrating one's ability to competently execute hard work was a form of capital. "Getting by" was a mantra and a way of life in rural Vermont, as exemplified by Nancy's mother putting away "500 jars of stuff," or Nancy herself canning 148 pints of wild



porcinis. Dale's remembrance of helping a neighbor during his childhood demonstrated the nexus of hard work and frugality:

We would go out and spend all morning picking sweet corn, 'cause they had a big field of sweet corn. And we would just pick and pick and pick and pick. And then we would have to husk it all, and husk it, and husk it, and husk it. And the farmer's wife and her mother and sister, it was canning day for them. It sounds kind of like an Amish, or a real old-time thing, but that would have been, like, 1976. .. Most people do a little bit for the freezer, maybe can some, but this family put up 200 quart jars of corn.

Cormac related a similar view of how the values of hard work and frugality were passed down through the generations:

Having grown up as a son of a Yankee woman, I've always been taught to have this certain economy of motion and economy of energy to be applied to something. And also, a kind of fairly brutal view of the necessity of making a living and not wasting food; I can't stand to throw away a plate of food. We've always had this consciousness in my family, growing up, and you know, we were living pretty tough. Lean, lean lifestyle. So I always had a consciousness of really having to make everything count.

There were 11 Neos, ranging in age from 31 to 84 (see Table 4). Mark, Larry and Liz grew up in large cities (Philadelphia, Chicago and Los Angeles, respectively). Jeremy was raised in Burlington, Vermont, a small city. Six Neos grew up in suburban satellites of New York City; Penny and Tom in Connecticut, Jen on Long Island, and Anthony, Stewart and Stan in New Jersey. After marrying, Jen and Anthony lived in New York City for several years before relocating to Vermont. Berta grew up in Germany and Turkey, spending time in Ankara as well as in smaller cities.

None of the Neos mentioned privation or need as being a presence in their childhoods. The Neos experiences of nature were more leisure-oriented than those of the Rurals. Stan, Tom, Stewart and Mark mentioned woods play as being important in their childhoods. Jen, Stewart, Mark and Liz all attended summer camps in their youth, which exposed them to nature. Yet,

unlike the Rurals, few Neos had direct contact working with nature during their childhood. One exception was Anthony, who worked on a vegetable farm during his high school years, a job he described as, “something different than a lot of other kids were doing, for sure.”

Admittedly, the Neos appeared to be a slightly more heterogeneous group than the Rurals. Penny and Mark, with their emphasis on plant communication, may possibly represent a habitus that is distinctive from the rest of the Neos. Yet, I did not find their differences from the other Neos to be so significant as to warrant a third category of gatherer. Had my data set been larger, perhaps I would have considered this division more fully. For the purposes of the analysis at hand, these 11 individuals demonstrated very different views of nature and gathering than the Rurals, and thus I believe the grouping to be defensible.

Some of the greatest differences between the Neos and Rurals involved cultural capital. Cultural capital was, generally, not plentiful on rural farms. Rurals had less access to concert halls and museums (which are more common/easily accessed in urban and suburban areas), as well as to higher education, than Neos (in 1940, when many of the older Rurals were children, only 4% of Vermont adults held a four year college degree – see history chapter). Rurals averaged 14 years of education, while Neos averaged 17 years of education (see Tables 1 and 2). Rurals were more likely to obtain technical degrees, and their jobs, largely, were what would be described as “blue-collar”: e.g., factory worker, butcher, maintenance worker, quarry worker, and wood grader. Neos, by contrast, held more white-collar positions - teacher, nurse, paralegal, film maker (Tables 1 and 2) – and hailed from homes with greater cultural capital. While most of the Rurals’ parents were farmers, Neos like Tom, Stan, Berta, Mark and Penny had well-educated parents holding prestigious jobs - a Yale University professor, a dentist, a noted plant pathologist, a botanist, and a chemist.

“The fundamental proposition that the habitus is a virtue made of necessity is never more clearly illustrated than in the case of the working classes,” wrote Bourdieu (1984, p. 372). The rural, agrarian habitus was a habitus of necessity, born of a cash-poor economy (the field) where hard work and frugality were instilled virtues. This habitus persisted even after the Vermont economy transformed to a modern, non-agrarian-focused economy. The dispositions of the rural, agrarian habitus survived in the Rurals’ attitudes towards money, nature, and gathered products long after privation ceased to be a daily survival issue. This is because of the ingrained dispositions of the habitus. As Bourdieu (1984) noted, agents cannot escape long-instilled notions:

The specific effect of the taste for necessity which never ceases to act, though unseen – because its action combines with that of necessity – is most clearly seen when it is, in a sense, operating out of phase, having survived the disappearance of the conditions which produced it. One sees examples in the behavior of some small craftsmen or businessmen who, as they themselves say, ‘don’t know how to spend the money they’ve earned,’ or of junior clerical workers, still attached to their peasant or working-class roots, who get as much satisfaction from calculating how much they have ‘saved’ by doing without a commodity or service (or ‘doing it themselves’) as they would have got from the thing itself, but who, equally, cannot ever purchase it without a painful sense of wasting money. Having a million does not in itself make one able to live like a millionaire; and parvenus generally take a long time to learn that what they see as culpable prodigality is, in their new condition, expenditure of basic necessity. (p. 374)

For example, in my interview with Lucius, he mentioned how new residents in Vermont would rather call up Boston Market for a fresh meal than attempt to make their own dinner.

Later, Lucius admitted:

Well, I probably have money now so I could go to Boston Market or McDonald’s or wherever, but I don’t choose to. I choose to gather my food, and I choose to eat my gathered food.

Table 3. Characteristics of rural-raised gatherers (N=13)

Name	Sex	Age	Education	Hunter Angler Trapper	Sells wild edibles	Gathered as a child	Source of gathering knowledge	Employment
Cormac	M	41	Bachelor's degree	H, A	Yes	Yes	Family, books	Musician, music producer
Ward	M	48	Bachelor's degree	H	Occ.	Yes	Family, books	Carpenter
Paul	M	55	2 yr. technical degree	H, T	Yes	No	Family	Wood grader
Eric	M	57	Bachelor's degree	H	Yes	Yes	Neighbor, books	Farmer
Lucius	M	58	2 yr. technical degree	H, F	Yes	Yes	Family	Farmer, technical educator
Russ	M	59	High school	H	Yes	Yes	Family	Maintenance worker
Leonard	M	64	High school	H, A, T	Yes	Yes	Family, books	Gatherer
Ida	F	65	Bachelor's degree	H, A, T	Yes	No	Books, family	Gatherer
Gillian	F	65	Bachelor's degree	No	Yes	Yes	Family, books	Writer
Ralph	M	68	High school	H	Yes	Yes	Family	Butcher
Nancy	F	78	High school	H, F	No	Yes	Family	Homemaker
Dave	M	78	High school	H, T	Yes	Yes	Family	Factory worker
Joseph	M	80	High school	H, F	No	Yes	Family	Merchant marine, quarryman
Average		63	14 years of edu.					

*Note:* The hunter/angler/trapper column uses abbreviations H, A, and T to indicate hunter, angler and trapper, respectively. In the "Sells wild edibles" column, "yes" means the person sells wild edibles annually, "occ." indicates the interviewee sold wild edibles at one point in his/her life, and no means never. For source of gathering knowledge, the primary source is always listed first.

Table 4. Characteristics of Neo gatherers (N=11).

Name	Sex	Age	Education	Hunter Angler Trapper	Sells wild edibles	Gathered as a child	Source of gathering knowledge	Employment
Jeremy	M	31	2 years of college	A	No	Yes	Family	Teacher
Anthony	M	42	Bachelor's degree	No	No	No	Books, neighbor	Plumber
Jen	F	43	Bachelor's degree	No	No	No	Books, neighbor	Paralegal
Stan	M	46	Bachelor's degree	No	Occ.	No	Books	TV producer
Tom	M	53	2 years of college	No	No	No	Books, neighbor	Computer programmer, artist
Mark	M	56	2 years of college	No	No	No	Books, courses	Teacher
Stewart	M	56	Masters degree	No	Occ.	No	Books, courses	Librarian, musician, DJ
Larry	M	60	Masters degree	No	Yes (as a broker)	No	Neighbor	Accountant, ginseng broker
Penny	F	64	Masters degree	No	No	No	Courses, books	Teacher, house cleaner
Liz	F	68	Masters degree + 4 yr. law clerk degree	No	Occ.	No	Courses, books, friends	Film maker
Berta	F	84	Masters degree	No	No	Yes	Family, books	Nurse
Average		55	17 years of edu.					

*Note:* The hunter/angler/trapper column uses abbreviations H, A, and T to indicate hunter, angler and trapper, respectively. In the “Sells wild edibles” column, “yes” means the person sells wild edibles annually, “occ.” indicates the interviewee sold wild edibles at one point in his/her life, and no means never. For source of gathering knowledge, the primary source is always listed first.

Lucius's statement demonstrated the near inescapable confines of the rural, agrarian habitus. Even though Lucius's life had progressed from deprivation to relative prosperity, he was bound to his innate dispositions. He possessed what would be termed 'disposable income,' yet he was unable to think of it in those terms. Going out to spend money on an expensive meal prepared by others, when farm food or gathered food was available, was unthinkable. It was a waste of money and anathema to his rural habitus. The prestige or luxury of dining out, a sign of cultural capital to those with a different habitus, was not, to Lucius, viewed as a form of capital, but an illogical extravagance. As Bourdieu (1984) commented, a factory worker cannot understand how a surgeon would spend two million francs on a watch, because the worker cannot understand how the watch is an "obligatory element in a certain style of life" (p. 375).

Bourdieu (1984) observed:

Thus, although working-class practices may seem to be deduced directly from their economic conditions, since they ensure a saving of money, time and effort that would in any case be of low profitability, they stem from a choice of the necessary ('That's not for us'), both in the sense of what is technically necessary, 'practical' (or, as others would say, functional), i.e., needed in order to 'get by,' to do 'the proper thing and no more' and of what is imposed by an economic and social necessity condemning 'simple,' 'modest' people to 'simple,' 'modest' tastes. (pp. 379-380)

Having outlined some of the differences in habitus between the Rurals and Neos, I will now attempt to show how these differing sets of dispositions produced different gathering practices.

### **Differences in views of nature**

One of the ways in which the gathering practices of the Rurals differ from the gathering practices of the Neos is rooted in how the two groups view nature. For example, Lucius and Nancy, both Rurals, mentioned several times that they "lived off of the land" during their

childhood. Neo Annie, on the other hand, exhorts her students to “re-connect with nature” and “re-skill,” that is, learn to gather and preserve gathered products through drying or canning.

The Rurals have no need to re-connect to nature, since they believe they have always been one with the land, “living off of it.” For the Rurals, nature is a source of sustenance, to be used for food (game and wild plants) as well as for other resources such as wood. The relationship implied by “living off the land” is a relationship of use and power, with humans in control. Having grown up with farming and gathering, Rurals are quite familiar with identifying edible wild foods, growing agricultural crops, slaughtering farm animals, and preserving meats, fruits and vegetables through a host of means including canning, drying or pickling. Rurals have no need to “re-skill.”

For Penny, nature is a presence that must be re-connected with and brought into her life for practical as well as spiritual purposes. In her teaching, Penny exhorts her students to move away from “a relationship of dominance over nature.” For Penny, nature is filled with spiritual beings and is a source of spiritual healing. Plants, in her words, should not be treated like “boxes of cereal.” Rather, plants must be honored; their permission must be obtained prior to their harvest; and, after harvest the plants must be shown gratitude. Penny’s relationship with nature is not anthropocentric; rather, she approaches nature as an equal partner.

By contrast, many Rurals, including ginseng diggers Russ, Paul, Dave and Ralph, expressed an anthropocentric vision of nature. All four denied that the plant was endangered and chafed at the idea of the state or federal government curtailing the ginseng season over fears of over-harvest. Only Larry, a Neo ginseng digger, felt that the government should put a moratorium on ginseng digging to “give it a rest,” and allow plant populations to recover. Larry’s support for a ginseng digging moratorium was evidence of a conservationist/protectionist

vision of nature because his statement implied support for the classification of ginseng as an endangered species. Penny, like many who are supporters of United Plant Savers, also believed ginseng to be endangered and instructed her students to avoid harvesting the root.

In general, Rurals were more prone to express views of nature that were anthropocentric than Neos. I attribute this tendency to a rural agrarian habitus, that is, a utilitarian viewpoint of nature instilled from a young age by the realities of farm life. Author Charles Fish (1995), who grew up on a farm outside of Rutland, Vermont, observed, “In large measure, the art of farming was an art of the use of living things” (p. 106). Fish (1995) drove home the point by commenting that animals were meant for slaughter, crops for harvest, and trees for felling because, as scripture enjoined, God gave humans “dominion over the earth” (p. 107).

Participation in hunting, fishing and trapping provided perhaps the most compelling evidence of an anthropocentric viewpoint in the rural agrarian habitus. Twelve of the thirteen Rurals hunted, fished or trapped. The only one who did not, Gillian, was married to a Rural from Michigan who hunted for much of his life (see Table 1). Only one of the Neos, Jeremy, hunted for a time as a boy, but he gave it up because, in his words, “killing things is hard.” He remained, however, an avid angler and continues to fish to the present day. Neo Tom reported that he hunted sporadically when he first moved to Vermont, but he never took to the sport as an annual rite. When I asked several Neos why they did not hunt, they mentioned that they “did not like guns” (Stan, Jen, and Anthony) or that they did not want to kill animals.

Using wild animals for meat or as a source of cash (in the case of trapping) was a part of the rural agrarian habitus; it was part of “getting by,” just as was the use of wild plants or farm animals. Practices are perpetuated by the habitus because the habitus is embodied history. Rurals hunted and gathered because their families and neighbors hunted and gathered. Rurals



grew up with guns, went to hunting camps in the autumn, and were inured, from a young age, to the sight of deer carcasses being weighed at the local game station or hanging out to cure in their neighbor's dooryard. Neos had none of these experiences, and therefore they did not readily take to hunting and trapping.

This is not to imply that Rurals expressed disrespect towards animals or nature. Many Rurals voiced concerns about overharvest and poor land stewardship practices. Eric refused to pick solitary mushrooms in the woods because he thought it, "bad manners." Ida and Leonard always stressed that they left more mushrooms and wild plants in the woods than they harvested. Author and farmer Charles Fish (1995) noted that the Vermont farmers he knew as a boy were some of the most caring animal owners he had ever encountered in his life. Cormac bemoaned practices which ruined fish habitat. Eric underscored his concern for nature and the land during our interview by apprising me with a cold stare and uttering, "There's no way you will ever understand the way I feel about this land that has been in my family for five generations."

However, Neos broached subjects such as sustainable harvesting practices more often than Rurals. Penny and Mark's repeated stressed the need to respect plant spirits and ask permission to harvest. Neo Stan simply said at one junction in his interview, "We need to protect nature." Jeremy described to me at length his fiddlehead picking practices, which entailed taking only two crosiers per plant, rotating harvest areas each year, and avoiding areas already harvested by other gatherers. Only one Neo, Breta, expressed an anthropocentric or utilitarian view of nature. When I asked her if she ever limited her harvests of mushrooms for sustainability reasons, she confided, "No, when I find a patch, I take them all!" By contrast, all of the Rurals expressed views that entailed an anthropocentric viewpoint at some point in their interviews.

Paul's lament about the changing demography in the state neatly encapsulated the demise of the anthropocentric viewpoint that is central to many Rurals' view of nature:

You know, Vermont isn't what it was a few years back. The people are.. It used to be that to live in a rural area, you were a rural person. I guess now, you don't have to be a rural person to live in a rural area. You have, there's electricity, there's paved roads, there's television, the internet. You can be living in the most remote, remotest part of the country and be plugged into Wall Street. And you know, it used to be that all the convenient, those conveniences were reserved for, you know, the urban areas. And rural people dealt with muddy roads and kerosene lamps and that kind of thing. Outhouses. That kind of thing! But that's not true anymore. And, so the people that live in Vermont, today, a lot of them came from other places. They aren't rural people, if you know what I mean. Many of them don't know what's in the woods a hundred yards behind their house. And they're different, their attitude is different, I.. You know, I used to remember when I would go around in the fall to get permission to trap, and people would be glad to see you. "Come on in and have a cup of coffee," and you know, they would talk about the fox that got in the chicken coop and go, "You catch him." Or, the coyote that caught their cat. "Glad to see you, come and catch those beavers that are flooding the hayfield." And now, phh, a lot of the people that, all those people died. They got old and died and somebody from New York City came and bought that old farm and you knock on the door and ask them (permission to trap) and they look at you in horror. "What! Trap or hunt! Oh, no, not on my property." You know, it's, it's different. And it's..it's changing, it's... I don't like it as well, but.. And then their children, they don't hunt and fish or trap. The Vermont I grew up with is gone, a lot of it is. It's still, a piece of it here and there, but it's, it's changed, uh,.. You know, everything I do, I, I work in the lumber industry and a lot of people are trying to stop logging. They want to shut off the National Forest and the reason that the National Forest system was established to begin with was to insure that the nation had an adequate timber supply. But it's, you know, they don't want anybody to cut a log in the National Forest. They don't want, they don't want people hunting on their land, or trapping, or digging ginseng or, you know. Everything I do is threatened. It seems like.

I used this long quote in full because it illustrates many of the perceived oppositions between Rurals and Neos regarding their views of nature. Rurals are attuned to hardships, Neos expect comfort. Rurals know the woods, Neos are ignorant of nature. Rurals respect trappers and their skills and services, while Neos abhor trappers and the killing of animals. Rurals understand the wise use of resources, including hunting,

gathering, trapping and logging, while Neos are protectionists who oppose all forms of harvesting in nature. These oppositions are inaccurate stereotypes, but like most stereotypes, they contain elements of truth.

### **Differences in gathering knowledge**

Interviewees who grew up on, or in proximity to, farms largely learned their gathering knowledge from other family members. Ten of the thirteen Rurals cited family members as the primary source of their gathering knowledge, while one (Eric) cited a neighbor as his first source for learning about mushrooms. The majority (11 out of 13) of Rurals also began gathering at a young age with other family members or neighbors (Table 1).

By contrast, only two of the eleven Neo gatherers gathered as children (Table 2). The other nine Neos all adopted gathering as young adults, typically after graduating from college. Only two Neos (Berta and Jeremy) learned their gathering skills from family members. The Neos' predominant avenue for learning about wild edibles was self-education through field guides. Formal instruction was also a source of learning for four of the Neos. Penny took courses from two herbalists; Liz took a mycology course at a local university; Stewart attended an adult continuing education course on mushrooms; and Mark took field courses in biology and botany during his college years. Larry, Tom, Jen and Anthony reported that they learned additional gathering skills from rural-born neighbors, but books remained their primary sources of gathering knowledge.

Six Rurals reported using books as supplementary sources of gathering knowledge. Still, the primary knowledge came from family members and neighbors. None of the Rurals received formal instruction in botany, mycology or gathering, although Eric is an avid reader of mycological texts.

Rurals and Neos showed marked differences in the depth of their gathering knowledge. For example, with mushrooms, older Rurals tended to collect only one, or only a few, species. As mentioned in the profiles section, Nancy only collected what she called “the white mushroom,” the porcini (*Boletus edulis*). The only other mushrooms Nancy mentioned knowing, but not collecting, were the “red mushroom” (perhaps a different species of *Boletus*), and the “crazy mushroom” (a mushroom I could not determine from the conversation). This restriction of gathering knowledge to only one or two well-known species of fungi was apparently common amongst those raised on or near farms. When Tom, a Neo, first tried to learn mushrooms from his rural neighbors when he moved to Vermont, he found their mycological knowledge to be quite specialized. One neighbor, he related, only collected honey mushrooms (*Armillaria* sp.). He said of two other neighbors’ mushroom knowledge:

It was very limited and it was always what they knew from what people showed them, or their parents showed them, or their grandparents, or something like that... Jack had, like, 4 or 5 different mushrooms he would find. And Marilyn came and she would find inkiies and shaggy manes. And she knew those, so she would point those out. But you’d say, “Well, what about those ones?,” and she would say, “Oh, I don’t go anywhere near those!”

I asked Ward, who grew up on a rural farm near the town where Neo Tom now lives, if Tom’s characterization of older residents having limited mycological knowledge was correct.

Definitely. I haven’t been out much with the older Vermonters, but most of the time, that’s exactly what they’ll say: “Oh, I remember my brother so-and-so picked this particular thing.” And there might have even been a name that we don’t put with the same mushroom. So, yes, I think that’s very true, I’ve heard that many times. You know, somebody’s grandmother used to go pick this in the spring. It was always just that: one or two kinds (of mushrooms).

When Ida and Leonard appeared on a Vermont Public Radio show devoted to gathering, a former resident of Barre, Vermont named Rene called in and confirmed that mycological

knowledge was indeed narrow, and often differed from immigrant group to immigrant group.

Rene remarked:

You know, it's interesting, 'cause different nationalities pick different types of mushrooms. Like the Italians would pick a certain kind, and my wife's folks, being Russian, they would pick a different kind entirely. So it's kind of interesting. And Polish people picked a different, another kind. So it was kind of interesting, the difference in nationalities, what they picked for mushrooms.

Most of the Neo mushroom gatherers I spoke with, by contrast, gathered 20 or more different species. Neos Stewart, Liz and Berta knew dozens and dozens of species and acted as local mycological identification experts. Only Rurals Ida, Leonard and Eric, who all sold mushrooms for a living, knew dozens of species, and the bulk of their knowledge was more recently acquired through field guides. Thus they were an exception to the older rural gathering practice of picking a single or limited number of mushrooms as learned from relatives. For older Rurals, knowledge of one or several wild mushrooms was sufficient; they saw little need to invest time and effort into building their mushrooming knowledge into a form of cultural capital. Only today, with restaurants and wild food CSAs demanding wild mushrooms, can Rurals like Ida and Leonard justify investing great amounts of time into learning mushroom taxonomy and nomenclature.

Five of the eleven Neo gatherers (nearly half) used scientific genus names or botanical binomials to refer to plants and fungi in their interviews. Yet only three of the thirteen rural-born gatherers (less than a quarter) used scientific species names. All three sold their harvests commercially and all three also led gathering forays. Of the five Neos who used scientific nomenclature, four taught classes on gathering or led gathering forays, and the fifth, Berta, volunteered at the local hospital to identify mushrooms suspected in poisoning incidents.

The use of scientific nomenclature is a form of cultural capital, and an indicator of educational qualifications (Bourdieu, 1986). The use of scientific nomenclature signifies an investment of time, in the form of learning, as well as access to education, or at the very least, access to botanical/mycological texts and field guides. As Bourdieu (1986) remarks:

The accumulation of cultural capital in the embodied state, i.e., in the form of what is called culture, cultivation, *Bildung*, presupposes a process of embodiment, incorporation, which, insofar as it implies a labor of inculcation and assimilation, costs time, time which must be invested personally by the investor. Like the acquisition of a muscular physique or a suntan, it cannot be done at second hand (so that all effects of delegation are ruled out). (p. 244)

For older, rural-born gatherers, time and economic capital were limited. Any excess in either was funneled not toward improving their gathering skills, but rather toward improving their economic circumstances. Spending time learning mushroom identification while on a farm was not possible, because such an activity would have been considered a leisure activity. Leonard only began learning mushroom identification and mushroom binomials in earnest in the 1990s after meeting Ida. Because Ida and Leonard sell their fungi and wild plants commercially, knowledge of plant and fungi binomials is a cornerstone to legitimizing their business credentials. But for other rural-born residents, learning botanical names of plants was unnecessary. Russ recalled the following exchange when taking a botanist out with him to survey ginseng populations:

Well, yeah, he'd say, "Well, what do you call this?," you know, and I'd tell him what I thought it was. Then he'd spiel off the Latin name, you know, which didn't mean nothing to me.

In Bourdieu's (1986) view, cultural capital, like the knowledge of plant and fungi nomenclature, can transmogrify into symbolic capital and become a proxy for expertise:

Because the social conditions of its (cultural capital) transmission and acquisition are more disguised than those of economic capital, it is predisposed to function as

symbolic capital, i.e., to be unrecognized as capital and recognized as legitimate competence. (p. 245)

The use of botanical binomials confers status upon the user, thus validating their position as teacher, expert gatherer, or undisputed savant of plant and fungi identification. Its use identifies one as a cognoscenti, for it, in Bourdieu's (1991) terms, references the "consecrated arbiters of legitimate usage" (p. 63), namely, in this case, taxonomists. That more Neos know, and are conversant with, scientific names for plants and fungi than Rurals is not trivial. Use of botanical nomenclature leads to professionalization of knowledge, which is a form of power which can be used by individuals within the field of gathering or by individuals outside of the field of gathering (e.g., individuals working for regulatory agencies). For example, McLain (1998) found that amateur mycologists with knowledge of scientific nomenclature and scientific research methods were able to work with the U.S. Forest Service to exclude commercial gatherers from certain areas they used:

...Stakeholders who are well organized and well versed in scientific language and procedures (are unfairly privileged) over stakeholders (including many commercial harvesters) who are politically less well organized and in some cases, less well versed in the language and practices of scientific knowledge and production. (p. 623)

Neos exhibited a more formalized manner of learning about wild plants and fungi than Rurals, relying more on books and classes than on oral transmission of knowledge from family or friends. This formalized study would be labeled a leisure pursuit by Bourdieu (Bourdieu, 1984). Neos were also more likely to use scientific nomenclature to refer to species than Rurals. The use of scientific binomials served as a marker of learning. It also demonstrated distinction by conveying an ease with scientific language, which is a legitimating language, a language of power (Bourdieu, 1991). This was not the only arena where Neos and Rurals differed in the

language they used to describe aspects of their practice. The two groups also differed in the ways they described the gathered products.

### **Gathered products as capital**

#### **Gathered products as economic capital.**

Those with a rural agrarian habitus generally viewed wild edibles and medicines strictly as economic capital, whereas Neos often imbued wild gathered products with greater meaning, often using them as social and symbolic capital. Perhaps the most striking example of the differences between how the two groups viewed gathered products as capital involved the sale of wild edibles and medicines. Nine of the 13 Rurals sold wild edibles or wild medicines on an annual basis. A tenth, Ward, once sold edibles through a stand at a farmers market with his ex-wife when he was younger. Only 4 of the 11 Neos sold wild edibles at one time in their lives, but those sales were sporadic, i.e., not an annual source of income. Three other Neos profited from gathering, but their earnings were a step removed from direct harvesting for profit. Penny and Mark made the majority of their income from teaching gathering skills, while Larry earned income from brokering ginseng in Hong Kong for local diggers (Larry also dug some wild ginseng, but the bulk of his ginseng earnings came from acting as a broker for other diggers).

As mentioned earlier, two of the Neos, Stewart and Jeremy, voiced strong opposition to selling wild edibles. Penny disapproved of the digging and sale of ginseng for money, citing its endangered status. In Fine's (1998) studying of mushroom gatherers, gatherers who disdained those who sold mushrooms did so because they had "(turned) traitor" (p. 213) on nature as a sacred space. Indeed, Stewart and Jeremy's convictions stemmed from a moral objection to the commoditization of nature. Only one Rural, Peter, voiced displeasure with people who sold porcinis. To the rural, agrarian habitus, using wild plants to earn money was congruent with the



anthropocentric view of nature. On farms where capital was scarce, the opportunity to earn income from the sale of wild plants or fungi was viewed positively, particularly in the years during, and immediately after, the Great Depression. For example, money that Ralph and Dave earned from ginseng was turned over to their parents to be added to the farm's general fund. The Neos, who grew up in cities or suburbia, did not experience the hardships of a cash-poor rural economy, and thus were far less likely to view gathering as a money-making venture. McLain (2000) noted a similar phenomenon in her study: rural-born foresters in the employ of the US Forest Service were more likely support commercial mushroom pickers than more well-educated Forest Service scientists.

The Rurals' tendency to view wild edibles as an avenue to earn money persisted through the twentieth century. Ward was the second youngest of the rural-raised interviewees. Yet when Ward's daughter was young, he taught her how to gather fiddleheads as a means to earn extra spending money. As reported in the previous chapter, all of the rural-raised ginseng diggers - Russ, Ralph, Paul and Dave - avowed that they did not dig the herb solely to make money, but each admitted that the cash was useful. Paul's comment was typical:

I paid off a truck loan one year, finished paying it off with what I had (the proceeds of his ginseng sales). I always find a good use for it, you know, it's always, there's always something that... It makes a difference.

The circumstances of necessity which circumscribed many a rural farm, and the attendant virtues of utilitarianism and frugality, made gathering for income a viable piece of a larger livelihood strategy. To the rural-born interviewees, wild gathered plants, fungi and medicine were not only a source of income, they were also important sources of food. According to Leonard, who grew up in what he terms the "vanishing mountain

tradition,” he and most of his neighbors routinely relied upon wild foods and medicines on an annual basis:

You don’t have to go back many years where everybody was collecting 10 percent of their food right from, you know, just wild. You take cider, you take apple sauce, you take berries and jam, spring greens, I mean, everybody was doing it. It wasn’t just two people doing it.

Ward remembered wild foods as a staple of his family’s diet:

I mean, my mother always baked. It was almost always the blackberries or the raspberries that had been picked. And also the season of strawberries, you know, frozen or canned or whatever. I remember the dandelions, and when fiddleheads were in season, so. I mean, they were a staple. Not that they had to be, you know, but they were on the table a lot of the time, so.

Evans (1996) classified wild foods into three types: hunger foods, wild staples, and wild luxuries. Evans (1996) defined the three types of wild foods as follows:

As a broad generalization, hunger foods may be seasonally important; unpalatable; labor intensive and/or socially taboo. Wild staples are ingredients of everyday meals which are integral parts of cultural foodways or food patterns – many are common weeds and pests associated with arable land – and wild luxuries are rare, valuable or otherwise prestigious items of food from the wild.

As the quotes above from Leonard and Ward illustrate, Rurals regarded wild foods as wild staples, that is, common fare eaten annually. In the rural, agrarian habitus, wild plants were quite simply a form of economic capital because they supplemented garden-raised or store-bought food. The Neos, on the other hand, as I shall soon discuss, were more prone to view wild foods as luxury goods.

### **Gathered products as social and symbolic capital.**

Only four of the thirteen Rurals, Cormac, Ward, Gillian, and Joseph, mentioned sharing edibles with neighbors or friends, i.e., using wild edibles as social capital to maintain bonds. For Rural Nancy, sharing porcinis was unthinkable:

The mushrooms were something that you had to go out and work for. And you might not get them. And so when you got them, you kept them to yourself. You know?... That was a food that you didn't share with everybody. I don't ever remember sharing it with anybody. Not that I was selfish or anything. I wasn't shown that side of being a mushroom picker, you know?

By contrast, eight of the eleven Neo gatherers reported sharing wild edibles. Tom, Jen and Anthony all shared extra bounty amongst themselves after productive gathering trips. Gathering instructors Mark and Penny shared gathering sites with students, and later prepared and ate communal meals of wild edibles together. Jeremy and Stewart made a point of sharing unique gifts of wild edibles with friends and family. Perhaps some aspect of sharing wild foods amongst the Neos was, in Michael Pollan's (2006) words, "showing off." However, the sharing of gastronomically pleasing wild edibles amongst an appreciative audience - Stewart's wild pear kimchi, Anthony's morels, or Jeremy's wild grape wine, to name three examples - also built symbolic capital, because the sharer was accorded status for their taste/distinction (in fine foods) and skills (the ability to find, identify, harvest and artfully prepare rare, wild edibles). For Bourdieu (1977), the building of symbolic capital through gift giving was ultimately seen as a form of power, because the act of dispossession led to "obligation, gratitude, prestige, or personal loyalty" (p. 195).

Consider Jen's description of a locally-sourced meal she served to a number of guests. The centerpiece of the dinner was a locally-raised, freshly slaughtered side of veal topped with a cream sauce made with wild morel mushrooms:

So we had this gigantic rack of veal ribs. And we had pasta that we made from our own free range eggs. And a cream sauce, made from raw milk that I get from a lady in Dorset. With the morels. And it was for eight people. It's like, shhh, it was like a thousand dollar dinner, you know?

In her statement, Jen, a former resident of New York City, revealed her knowledge of how expensive a locally-sourced meal would cost in an upscale eatery in New York, thus

displaying a familiarity with elite dining establishments. The allusions to locally-sourced foods - free-range eggs, raw milk and the wild morels - were code words, which to the cognoscenti, e.g., a foodie or one interested in fine dining, would convey great meaning and weight. While the meal was a generous sharing of locally sourced foods, it was also an exhibition of taste intended to garner prestige, or symbolic capital. It was expected that the guests would understand the rarity and luxury of the meal. “A work of art,” wrote Bourdieu (1984), “has meaning and interest only for someone who possesses the cultural competence, that is, the code, into which it is encoded” (p. 2). So here, the guests needed a “code,” a cultural competence, to appreciate the meaning of raw milk, wild morels, locally-raised veal, and free range eggs.

Elevating a meal from a simple but necessary daily function to a dining experience is a form of distinction. The attention to the origin of the meal’s components is an example of, in Bourdieu’s (1984) words, “(Shifting) the emphasis from substance and function to form and manner” (p. 196). For Bourdieu (1984), stylizing the dining experience, for example through the use of seating plans, the presentation of different courses requiring different plates and cutlery, is a sign of aesthetic refinement. Writes Bourdieu (1984):

Taste classifies, and it classifies the classifier. Social subjects, classified by their classifications, distinguish themselves by the distinctions they make, between the beautiful and the ugly, the distinguished and the vulgar, in which their position in the objective classification is expressed or betrayed. And statistical analysis does indeed show that oppositions similar in structure to those found in cultural practices also appear in eating habits. The antithesis between quantity and quality, substance and form, corresponds to the opposition – linked to different distances from necessity - between the taste of necessity, which favors the most ‘filling’ and most economical foods, and the taste of liberty – or luxury – which shifts the emphasis to the manner (of presenting, serving, eating, etc.) and tends to use stylized forms to deny function. (p. 6)

Neos were more apt to ascribe additional attributes to wild foods than rural-born gatherers. Five of the eleven Neo gatherers (Jeremy, Berta, Stan, Penny and Mark) referred to

wild foods with positive descriptors such as, “organic,” “highly nutritious,” “not engineered,” “full of micro-nutrients,” and “pesticide free.” (By contrast, only three of the thirteen Rurals referred to wild edibles as “organic,” or “extraordinary for health,” and all three had college degrees, and one of them, Gillian, worked as a food writer). Food imbued with such extra attributes were elevated from common fare, or wild staples, to more rarified, luxury dining due to the emphasis placed on form and manner over function. In *Distinction* (1984), Bourdieu noted that body image and eating habits are tied, and that the professional classes were more likely than working classes to emphasize eating as a means of maintaining health and slimness. Thus referring to a food’s health qualities is yet another marker of distinction. This is not to say that all Neos were health conscious, however. Three (Liz, Jen and Anthony) specifically mentioned that eating for health reasons was unimportant to them.

Interestingly, two of the Rurals, Leonard and Lucius, vigorously disputed the idea of wild plants being healthier than other foods, citing acid rain and pollution. Decried Leonard:

You are totally in denial if you think you are going to run up that hill and you’re going to pick something that isn’t polluted. The whole earth is polluted. Where have you been?

While the Neo Penny praised wild foods as organic and central to the concept of locavorism, Rural Lucius scoffed at the entire premise of organics and the locavore movement:

You get people coming up here and telling us how to raise organic foods and then they want to register us and regulate us and they want to come to my house to see if I’m all organic. And if I say I’m organic, I’m as good as my word. When I say my food’s organic, it is organic. And it was organic. We were all eating organic and local long before NOFA (the Northeast Organic Farmers Association) came along and said, “Jeez, this is a great idea.” They didn’t have Jack-shit to do with it. We’d already figured it out.

Lucius sold organic produce at farmer’s markets, but bristled at the inspections and the appropriation of organic farming - long a mainstay in Vermont where many a subsistence farmer

could not afford fertilizers or pesticides -by the newly established dominant class. But for Neos Penny and Mark, the concepts of organic farming and locavorism (including gathering), were wrapped up in their commitment to the Transition Town movement, which is predicated on the idea of building environmental sustainability and strong local economies to weather looming threats from peak oil and climate change.

Emphasizing the health aspects of wild foods may be one way of elevating their capital, but tying wild foods to a larger philosophical stance in the way that Penny and Mark did is an even a greater display of distinction. In so doing, Penny and Mark displayed their education, and more importantly, their political alliances. Appiah (2008) observed the following about those individuals who embrace the organic movement:

He prizes organic foods that are uncontaminated by pesticides and additives, and shudders at how agribusiness has despoiled the environment. His commitment to organic, locally produced food is more than a consumer preference; it's a politics and an ethics. (pp. 245-246)

### **Gathering as work versus gathering as leisure**

Differences in habitus, ways of viewing nature, and ways of viewing gathered wild foods and medicines produce different gathering practices. Given that nine of the thirteen Rurals sold gathered products, it is unsurprising that their descriptions of gathering conveyed a very practical, workmanlike quality. As Rural Nancy said of porcini hunting, "there was a purpose behind it." She added, it was, "a lot of work, oh lord, it was an awful lot of work." When I asked ginseng diggers Dave and Ralph why younger generations did not continue the traditional or hunting and digging the root, they both answered that it was "too much work" for the younger generation. Not only did Rurals view gathering as a job, they insisted that the time they spent gathering needed to pay for itself:

I would pick anywhere between 15 to 20 pounds of mushrooms a week and sell them at the local coop and to a local restaurant or two. So very small-scale, but enough that it kind of validated my time in the woods in terms of making some kind of money. (Cormac)

Eric similarly reported that selling mushrooms at the farmer's market was a, "monetization of my effort." Again, such views showed a rationalization of gathering as a means of obtaining financial capital in the form of food or supplemental income.

Neos did not use work metaphors when discussing gathering. Instead, they more often described gathering as a leisure activity. Stan and Jeremy both called gathering "a hobby." Tom stated that gathering was "a good excuse" to go out into the woods. Stan and Anthony both opined that even if one did not find any edibles during a foray, it was still a positive day because they got to spend time in nature. Stan's reference to "playing" in nature was the most colorful description of viewing gathering as a leisure space, and contrasted sharply with the adjectives used by the Rurals to describe gathering. On rural farms, there was little time for "play."

For Rurals, nature was a work space and their gathering practices were seen as labor-like. For Neos, nature was a leisure space and their practices were, accordingly, viewed as a form of leisure. In Greenbaum's (2005) words, the Neos exhibited a form of "nature connoisseurship," valuing "nature for nature's sake" much in the way that art is valued for art's sake. Wrote Greenbaum (2005):

The dispositions that direct people's perceptions and evaluations of the natural environment are conditioned by whether their direct involvement with it consists primarily of extractive/productive work or of contemplation. (p. 398)

The rural, agrarian habitus, born of necessity, spawned an anthropocentric view of nature, which fostered a largely materialist practice of gathering. The Neos, raised with material security, were more inclined to exhibit nature connoisseurship and consequently viewed their gathering practices as leisure. These differences were most pronounced between the older Rurals

and the Neos as a group. For Rural Nancy, a fruitless day spent in the woods looking for porcinis would signify lost time and gas money, while for Neo Stan, the same situation would be considered a pleasant day that allowed for communing with nature. However, a few of the younger, more educated Rurals shared some traits with Neo gatherers. Eric and Cormac in particular reveled in complex ecological processes, one of the greatest markers of “nature connoisseurship” for Greenbaum (2005).

The outdoors activities of the interviewees suggested a similar divide. As mentioned previously, twelve of the thirteen Rurals hunted, fished or trapped, while only one Neo fished annually. Hunting, fishing and trapping, like gathering, projected a sense of working on the land and living off of the land. The outdoor activities that Neos mentioned were more leisure-oriented. Stan and Stewart liked downhill skiing, Berta enjoyed painting, Mark was an avid birder, and Stan participated in French and Indian War re-enactments.

I asked several of the Rurals if they felt that their way of gathering was any different than the gathering carried out by newcomers to the state from urban and suburban areas. Cormac and Ward, two of the youngest Rurals with college degrees, both said that they did not see significant differences. Lucius, however, was adamant that there was a stark difference between the gathering practices of the two groups:

I think the people that come here and do it (gathering) now maybe don't do it because they had to, they do it because they want to, and I think they maybe see it as sport rather than necessity. They know that they can still call Boston Market and that they can still get their food. And I think it's like, “Oh, we're going to go to Vermont and we're going to go gathering,” you know? It's like this big thing where, it's, it's something they heard about. Like I say, maybe it's, they're thinking more along the sport side of it. “It'll be really, really interesting, we'll have a really good time, and, you know, worst case scenario is, we might end up with something to eat out of it.” So. I don't think it's done in the context that we did it in. It's a different context. That, I guess, that's the way I see it, that's the way I think about it. They're doing it for sport. I'm still doing it for necessity.



The difference in gathering practices between the Rurals and the Neos is, by and large, a dichotomy between gathering for necessity as a part of a larger livelihood strategy, and gathering as a gastronomically-inspired leisure activity. It is an opposition between viewing nature as a work space and nature as a leisure space. Lastly, it is a dichotomy between viewing gathered products as economic capital and viewing gathered products as cultural and symbolic capital.

### **Symbolic violence**

For Bourdieu, symbolic violence is violence perpetrated upon an individual in a symbolic, not physical, manner for the purpose of maintaining social hierarchy. In symbolic violence, agents are denied capital or other resources, or otherwise made to feel inferior. Gender relations and race relations are areas traditionally rife with symbolic violence. Like distinction, symbolic violence is used by elites to legitimate practices and to maintain social hierarchy.

For symbolic violence to work, individuals must be complicit in their own domination by the elite (Bourdieu. 1991). That is, through conditioning, agents “misrecognize” the domination as part of “the natural order of things” (Webb et al., 2002, p. 25). In my interviews, I coded two instances where Rurals cast their practices in a negative light in comparison with the newer norms and practices of the Neos. For example, Joseph recalled:

Now, we used to eat woodchuck. People might, uh, laugh a little. There’s nothing wrong with, like rabbits, same darn thing. It’s a rodent. But it cleans up, there’s nothing wrong with them. But my mother used to make that woodchuck and it was delicious. She used to make it cacciatore style, like chicken cacciatore?

While Joseph is not expressing shame about eating woodchuck, his comment about, “people might laugh a little,” indicates his awareness that in today’s Vermont, eating woodchuck is no longer acceptable behavior and might even be viewed with derision. Lucius’ discussion of his family’s cheese making reveals a similar sentiment:

Well, as I was saying, you know, we didn't make fancy cheese like Boursin or things like that, but we had cottage cheese with chives and sage. Wild leeks went into the cheese and chives. And now, this is advertised as some sort of specialty! But we made hard cheese with sage in it. Hard cow cheese with sage in it. You know, the cheese sat right on the pantry shelf. We buttered the outside with our own butter, and that's what preserved it. There again, it was an oil preservative and I don't know where that was learned but, you know, it was something I knew before I was old enough to talk properly.

Lucius's statement acknowledges that the Rurals' practice of making their own cheese with an oil preservative on the rind – a common practice of his childhood - would not be considered a desirable food item in contemporary Vermont. His family's farm cheese, even though it occasionally used wild leeks (now a specialty!), does not compare to a well-respected, mass-produced (once imported) soft cheese like Boursin, much less to the small batch, luxury artisanal cheeses now produced in the state (see Paxson, 2006; Rathke, 2013).

While Joseph's and Lucius' statements pertained to subjects other than gathering, they both referenced former practices of the Rurals that, due to changes in demographics and tastes, are no longer viewed as refined. In contemporary Vermont, artisanal cheeses, many produced by Neos, have replaced humble farm cheeses. The Rurals' practice of making homemade batches of hard cider has been eclipsed by a host of nationally recognized Vermont craft breweries and high-end cider mills (Dzen, 2012). And wild edibles, once staples of a rural diet, have been elevated to luxury foods. More than mere rural gentrification, these changes signify the imposition and consecration of a new hierarchy of practices.

Yet in Lucius's statements, there is also an air of resentment. Although he acknowledges the elevation of many of the new rural practices – artisanal cheeses and wild gathered foods – he is not fully complicit in his submission to the new order, as would be expected in a traditional Bourdieusian example of symbolic violence. When he describes Neo gathering practices as

“sport,” and declares that Neos don’t know “Jack-shit” about organic farming, he is expressing disdain for the colonization and transformation of traditional rural practices.

Lucius’s contempt was particularly pointed on the subject of regulation. Lucius avowed that the state, through rules concerning bathrooms in barns, concrete floors, stainless steel tanks, and pasteurization, “outlawed everything” and drove his father out of the dairy business. When I asked him about the resurgence of raw milk, he visibly sagged. “How ‘bout that?,” he said. His father, he explained, did not have the means to fight the regulators who compelled him to give up making raw milk. Yet newly settled Neos, with their economic, social and cultural capital, were recently able to influence legislation to allow raw milk to be produced in the state again. This situation mirrors that of Neos in rural France who also used their capital to achieve advantageous changes in regulations (Willis & Campbell, 2004).

## **Summary**

In this chapter, I used a Bourdieusian framework to analyze differences in gathering practices between Rurals and Neos. I found that differences in gathering stemmed from habitus, as manifested in attitudes toward and views of nature and the gathered products themselves. As such, the analysis circled back to my original question, why do people gather in Vermont? In addition to reasons such as enjoying time in nature, gathering for food, income or medicine, and enjoying time with family and friends, this present chapter demonstrates that habitus also plays a key role in shaping an individual’s reasons for gathering.

Vermont’s hardscrabble economy - the difficult rural economic field within which many Rurals were raised - instilled notions of frugality, hard work and utility as bedrock virtues of the rural agrarian habitus. Because of the scant distance from necessity and general lack of capital on rural farms, Rurals developed a habitus that naturally inclined them to view gathered

products, first and foremost, as economic capital in the form of cash or food and medicine. As Bourdieu noted (1984), “Necessity imposes a taste for necessity which implies a form of adaptation to and consequently acceptance of the necessary” (p. 372).

The Neos, raised in urban and suburban environments, did not know privation to the extent that the Rurals did. With a habitus freed from necessity, Neos, particularly those who came late to gathering in their early adulthood, were disposed to view gathering more as a leisure activity. These varying distances from necessity produced two differing gathering practices; one rooted in livelihood, the other in leisure. By emphasizing the use of scientific nomenclature, praising the health benefits of wild edibles and treating gathered products as luxury foods that can be converted into social and symbolic capital, Neos used the tactics of distinction (stressing form over function) to elevate their gathering practices over the gathering practices of the Rurals.

Willis and Campbell (2004) discussed how urban immigrants to a rural area in France transformed a working rural landscape into a “post-agricultural leisure space,” through a blending of the “strategies of the old peasantry with the skills and abilities of the educated urban elite” (pp. 317-318). In Vermont, a working agricultural landscape has been similarly transformed into a landscape of leisure, with downhill skiing and foliage-viewing now constituting two of the state’s largest tourist attractions. As Rural Paul noted above, pockets of older rural, agrarian practices persist in areas of the state, but they are dwindling.

At present, the practices of gathering for livelihood and gathering for leisure co-exist in Vermont, but interactions between the groups vary. Rural ginseng diggers rarely interact with Neo gatherers, and few Neos have taken up ginseng digging. Mushroom and fiddlehead gathering has led to some interactions between the groups. Ward, a competent rural-born mushroom gatherer, has happily shared his knowledge of fungi with select Neos. On the other

hand, a few Rurals have been able to penetrate largely Neo-dominated markets for wild edibles and wild edible lore. Ida and Leonard sell wild greens and mushrooms to some of the more exclusive restaurants in the state, and rural-born writer Gillian has used her capital (a literature degree and a position with a newspaper) to make inroads as a food writer extolling the virtues of gathered goods. I address a few of the potential directions, and potential pitfalls, for Vermont's rapidly evolving gathering field in the next, concluding, chapter.

## Chapter 8: Conclusion

### The transformation of the gathering field

When many of the older Rurals were children (the 1930s to the 1950s), gathering could not be classified as a field, or social space of its own, but was rather an extension of a rural way of life, part and parcel of the broader rural economic field. Today, I argue, gathering is a field unto itself, in Bourdieu's sense of field as a structured social arena. For example, there is an academic discipline, variously called non-timber forest products, non-wood forest products, or minor forest products, devoted to its study with its attendant literature (e.g., de Beer & McDermott, 1996; Jones, McLain, & Weigand, 2002; Laird et. al. 2010, Shackleton, Shackleton & Shanley 2011). (This is not to imply that scholars have not been researching the subject for centuries; rather, the topic underwent a revival and became a distinctive discipline in the 1990s [Sills et al., 2011]). There are numerous field guides catering to persons interested in identifying edible wild plants (in the United States, see Gibbons, 1965; Peterson, 1977; Lincoff, 1981; Brill, 1994; Elias & Dykeman, 2009). Classes in identification and best collection practices for wild edibles are now available through academic institutions as well as through freelance naturalists across the nation. Cookbooks exclusively focused on the preparation of wild foods are also proliferating (e.g., Gardon, 1998; Mogelon, 2001; Brill, 2010; Green & Scott 2010; Thayer, 2010; Boutenko, 2013).

As a distinct field, gathering is growing and transforming in different ways in different parts of the United States. In Vermont, gathering was once the domain of those searching for supplemental food or supplemental income. Many of the wild plants traditionally harvested for income were exported from the state, such as ginseng and cut ferns (see history chapter). As more Neos have taken up gathering, the practice has become more distinguished. As a result, an

epicurean-driven demand for wild edibles has arisen in Vermont, particularly for wild mushrooms and plants such as wild leeks, through venues including restaurants, farmers markets, and food coops. A few entities have surfaced to supply out-of-state metropolises with wild foods as well, such as Boston and New York (e.g., see Conniff 2011), and this trend may precipitate changes in the landscape of wild edible procurement and sale in Vermont. However, Vermont's wild edible markets remain small and the volumes produced are slight. This stands in marked contrast to states such as Oregon and Washington where high-volume, established markets for wild edibles and floral goods have existed for decades (nearly twenty years ago, the mushroom and floral trades alone in the Pacific Northwest were estimated to be worth more than 60 million dollars [Schlosser et al., 1991; Schlosser & Blatner, 1995]).

### **Newly contested spaces within the Vermont gathering field**

Gathering is resurgent in Vermont, fueled by gastronomically-oriented Neos taking to the practice (or supporting the practice through purchases). A number of the state's exclusive restaurants are creating additional demand for luxury wild foods to feed to their clientele of well-heeled tourist from the east coast's cities and beyond. What impact will this trend have on the resource base, interactions between gatherers, and the wild edibles marketplace? In the following sections, I speculate on some likely scenarios.

I foresee two contested spaces emerging within the gathering field in Vermont. The first involves access to the resource base. As mentioned before, the amount of posted land in Vermont has doubled in the past 30 years. Increasing development of land and an influx of additional Neos who do not have a predisposition to viewing land as a commons will likely result in fewer parcels being available for gathering, either through clearing of forests, outright loss to other uses, or posting.



Figure 4: Sign forbidding berry harvest on private property, Duxbury VT, Photo credit: Alan Pierce



Figure 5: Sign banning commercial fiddlehead gathering on land owned by Richmond Land Trust, Richmond, VT, Photo credit: Alan Pierce

There are additional signs that the closing of properties to gatherers is on the rise. For example, the floodplains of Richmond, Vermont have been used by commercial fiddlehead harvesters since the 1970s (Lebentritt, 1974), if not earlier. Three years ago, the Richmond Land Trust, owner of much of the floodplain, closed the area to commercial fiddlehead collection over conservation concerns (Photo 2). Meanwhile, in Duxbury, Vermont, I observed a private parcel of land specifically posted against berry harvesting in the summer of 2012 (Photo 3). The parcel was again posted in 2013. While these two examples provide only anecdotal evidence of land closure to gathering, they represent, to my mind, a marked departure from the concept of land as commons in Vermont.

As gathering grows in popularity, gatherers are increasingly coming into conflict with one another regarding knowledge of habitats and access to those habitats. Neos Stewart and Liz founded and ran a mushrooming club in northern Vermont for several years. The club imploded over interpersonal dynamics relating to knowledge of mushrooms and mushroom habitats.



Stewart reported that he grew tired of “being the most knowledgeable person in the room” and he complained that he never learned anything new at meetings or during forays. Stewart felt that he was being used by beginners who showed little appreciation or respect for his knowledge. Some of his prized gathering areas were ruined because he had shared them with mushroom club members:

It’s kind of vampiric, where people are basically wanting you to show them your spot or spots, wherever they are. And if you take them to some place, by three years later, the place has been totally ravaged! Cause they have told three other friends and supposedly promised them not to tell anybody. So. But, I mean, I, I only take dear friends and people I truly trust, which are not many in this business, to places now.

Stewart and Liz both related an incident wherein a new mushroom club member, “Chad,” learned about the location of a prized oak tree which produced a giant hen-of-the-wood mushroom (*Grifola frondosa*) each year (a premium edible and medicinal mushroom which can sell for hundreds of dollars, depending on size). Two days later, Liz’s friend, the landowner of the oak, reported that the mushroom had been stolen from the property. People in the town reported having seen Chad, a singular character not from the area, in the neighborhood prior to the theft. The theft was the proverbial “straw that broke the camel’s back” and precipitated the dissolution of the mushrooming club.

Commonly gathered edibles that are “weedy” species, such as dandelions or burdock, are unlikely to engender conflict between gatherers because they are so ubiquitous. But even the fiddlehead fern, a common riverine plant, is now coveted. Ida and Leonard report that they now have trouble finding “the big blue” fiddleheads they harvested years ago because they have been “over-picked so much.” Ida added, “Our fiddleheads are under serious threat.” Eric reported losing several prime fiddlehead harvesting areas due to interlopers using unsustainable picking

techniques – “you harvest it once and then you leave it; but these people come and they harvest it twice, and that kills them.”

When competition over resource access interfaces with market demand, pernicious effects can occur. The increased demand for fiddleheads has resulted in higher retail prices, which has, in turn, apparently, created an unsustainable feedback loop. When I moved to Vermont twenty years ago, fiddleheads sold for between one and two dollars a pound, mainly through organic food coops. Today, fiddleheads sell for six to eight dollars a pound and can be found in the largest grocery chain stores such as Shaws. Stewart laments the “shyster prices” being charged for fiddleheads and worries about the impact on the resource base.

Competition over gathering areas has affected me personally as well. Ten years ago, I was the only mushroom gatherer living on my road. Today, there are two other mushroom gatherers on my road. The mushrooms we hunt are the same species and their habitats are relatively small in area, thus leading to direct competition over patches. So far, certain patches have been tacitly respected as being under the stewardship of one individual or another, but other areas are de facto “first come, first served” areas. While I have learned some new knowledge about species and species’ proclivities from one of my neighbors, and vice versa, I occasionally rue the competition, having once had the run of the neighborhood to myself.

The second contested space within the gathering field encompasses the marketing of wild edibles. Webb et al. (2002) note that, “the transformation of a particular field always results in concomitant transformations or modifications of the identity of members of the field” (p. 30). This is particularly true of individuals who assume leadership roles in a field.

In Vermont, Rurals Ida and Leonard have amassed a great deal of symbolic capital as gatherers. They have been featured on radio programs dedicated to gathering and they have been

profiled by local newspapers and magazines, as well as by the *New York Times*. They have spoken at various forestry and food gatherings, including the Smithsonian Institution and Terra Madre, the meeting of the Slow Food Network. They are seen as local gathering authorities, and when the topic of Vermont gathering arises, their names inevitably arise as well.

Ida and Leonard sell wild edibles to some of the most elite dining establishments in Vermont. Each item they sell to a restaurant comes with a certification and identification form that includes information on safe handling and preparation of the plant or fungus. Each lot has an identification number, and chefs are requested to keep the identification papers on file for 90 days. The pair has taken out an insurance policy (to cover any potential lawsuits arising from accidental poisonings or other lawsuits) with an upper indemnity of one million dollars.

In return for their meticulous preparations, Ida and Leonard demand two things in return from their chef buyers. First, they ask for a premium price for their goods. Second, they make each chef pledge to never purchase wild edibles from anyone but themselves. Ida and Leonard stress that the exclusivity clause is necessary to insure quality control and maintain proper stewardship of the wild resources. However, I have heard other gatherers in Vermont grumble that the arrangement is tantamount to a monopoly over best outlets for wild edibles in the state.

Ida and Leonard have additionally proposed the creation of a lobbying group for gatherers that would help gatherers obtain fair prices for their products. To join, gatherers would pay a fee to Ida and Leonard's organization and undergo a certification program (designed and implemented by Ida and Leonard) that would test their knowledge of habitats, ethical collection practices and identification skills. Certification would entail several layers of attainment. Those enrolled in Ida and Leonard's organization would be able to use their certification as an entry

point with new chefs that they contact (outside of Ida and Leonard's pool), and Ida and Leonard's insurance policy would be extended to the gatherers they have certified.

Neos Penny and Mark have likewise gained a following and a level of symbolic capital through their own wild edibles school and teaching programs. Penny and Mark give numerous talks about wild edibles around the state and Penny has prepared a number of publications on wild harvesting of plants for food and medicine. Penny and Mark's school offers an eight weekend course (\$1,750) which, for successful participants, results in a certificate of participation. While neither Penny and Mark's certificates nor Ida and Leonard's certificates are formally recognized by businesses or state entities, each initiative points to an emerging trend in the professionalization and certification of gathering. In the future, gatherers may need to obtain greater cultural capital, in the form of certificates of competence, to access markets. In France, a push towards professionalization of gatherers created access restrictions to resources and markets and resulted in the destabilization of local livelihoods (Larrère & de la Soudière, 1984). These movements toward the professionalization of gathering in Vermont will warrant careful scholarly attention in the future.

### **The intersection of the gathering and regulatory fields**

Ida's rationale for professionalizing the gathering field is simple: "The FDA is going to shut us all down if we can't get something established." Currently, the U.S. Food and Drug Administration's Food Code section 3-201.16 states (US FDA, 2009): "Mushroom species picked in the wild shall be obtained from sources where each mushroom is individually inspected and found to be safe by an approved mushroom identification expert." The government has never defined what attributes qualifies a person to be "an approved mushroom identification

expert,” therefore the status of selling wild mushrooms remains a legal gray area that has largely gone unenforced.

In March 2005, the Los Angeles County Department of Health Services banned the sale of wild mushrooms at local farmers markets, citing safety concerns over wild harvested species not subjected to formal state food inspection channels (Brown, 2005). The ban was later rescinded. In 2011, the State of Maine passed a bill authorizing a wild mushroom certification program to “protect public health and the safety of the food supply (State of Maine, 2011).” Although now law, the certification program is not yet fully funded and staffed, and has yet to certify any gatherers of wild mushrooms.

Given the high profile reporting over the wild mushroom poisoning of four elderly patients at a California nursing home in 2012 (Lupkin, 2012), it may only be a matter of time before trade in wild mushrooms comes under more scrutiny from federal and state health and food safety authorities. Ida and Leonard are being proactive in anticipating greater oversight, but their efforts will likely not be enough. Any state or federal program for certifying wild mushrooms would require the pair to pay, register and be assessed by “approved experts.”

This past spring, a Maine legislator Russell Black proposed, “An act to prohibit the unauthorized harvesting of wild mushrooms and fiddleheads” (Thistle, 2013). The bill would make it a crime for gatherers to pick mushrooms, fiddleheads or other products from a landowner’s property without their written consent or an arranged bill of sale. The bill is specifically crafted to curtail commercial gathering of wild edibles from private lands. Should the bill gain support and become law, it could have potential spill-over effects to states such as Vermont.

Another area where the regulatory field intersects with and impacts Vermont gatherers involves the ginseng trade. Ginseng is listed as a species of concern under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and its harvest and trade is controlled and monitored by the U.S. Fish and Wildlife Service in cooperation with local state authorities. Concerns of ginseng overharvest recently spurred the State of Maryland to ban collection of the root on all state-owned lands (Wheeler, 2013). In June of 2013, the State of Vermont announced several amendments to its ginseng collecting regulations. Ginseng digging permits, once free, will now cost twenty dollars per year. More significantly, the minimum age for certification of wild ginseng roots will be raised from 5 years to 10 years of age, as determined by counting neck bud scars or “by other recognized means” (see [agriculture.vermont.gov/plant\\_pest/ginseng\\_certification/ginseng\\_rule](http://agriculture.vermont.gov/plant_pest/ginseng_certification/ginseng_rule)). Despite Rurals Paul, Ralph, Dave and Russ’s assertions that the plant is not endangered in the state, authorities have taken steps to curtail the trade. Limiting the ginseng trade to roots greater than ten years in age will significantly decrease the annual poundage dug in the state and the new fee structure may discourage some diggers from their activities.

### **Research summary**

My dissertation sought to fill a gap in the U.S. gathering literature by examining a lesser-studied region of the country. I found that gathering has a long tradition in Vermont and is newly resurgent. Gathering in Vermont takes place primarily on private lands and is abetted by a lingering (though seemingly endangered) concept of land as a commons. Vermont markets for wild edibles are small and informal, with many sales taking place at farmers markets, through gatherer-to-chef contacts, or through gatherer-to-store/coop contacts. These attributes stand in contrast to the U.S. Pacific Northwest, where harvesting takes place on large tracts of public land

as well as on private lands, and where markets for wild edibles and floral greens are dominated by commercial-scale buyers and purveyors. This research confirms that gathering differs from region to region in the United States due to historical factors, tenure systems, and market structures. Therefore national level discussions on the topic require greater nuance, particularly when attempting to address resource management actions and implementation of regulations (for gatherers and well as for products sold by gatherers).

My research uncovered several issues which may affect the gathering field in Vermont. The following warrant further monitoring:

- 1) The locavore movement, the Transition Town movement, and concerns over the healthiness and safety of factory farmed foods are spurring interest in locally-sourced foods, including local wild edibles.
- 2) Access to gathering areas may likely become more contested in the future due to a number of factors including land development, posting, the decline of the concept of the commons, and, as the ranks of gatherers grow, competition between gatherers.
- 3) Increased interest in some species is resulting in higher retail prices; if such prices spur profit-motivated harvesters to harvest more volume, this could result in a negative feedback loop wherein robust markets lead to the overharvest of some habitats.
- 4) There appears to be a trend toward professionalization of the field in the form of credentialing or certification, particularly for gatherers interested in marketing their products.

- 5) The regulatory field has the potential to change the gathering field dramatically, as seen in the case of newly proposed Vermont ginseng regulations and the recently passed Maine wild mushroom certification regulations.

My primary research question centered upon reasons gatherers gave to explain their practices. As mentioned in the literature review, greater understanding of non-commercial reasons for gathering was identified by several researchers (Anderson et al., 2000; Jones & Lynch, 2002; Carroll et al., 2003; Robbins et al., 2008) as a critical research gap. My research found that economics was not reported as a primary reason for gathering, even by those who depended upon the sales of wild plants and fungi for a livelihood or for supplemental income. Gatherers most often reported that they enjoyed the practice because it allowed them time to immerse themselves in nature. Gathering re-enforced a lifelong love of nature and anchored practitioners in time and space to specific landscapes and habitats. Gathering also provided a meaningful and relaxing way for respondents to interact with family and friends. It is also a practice that participants valued because it maintained physical as well as mental health.

Current federal forest policy, which classifies gathering into subsistence, recreational or commercial designations, fails to take into account the emotional and psychological importance of the activity to its practitioners. While it is the job of policy makers to protect natural resources for the public good, it is also the job of policy makers to protect customary rights and public access to nature. Gathering is one of humanity's oldest and most visceral activities. Current gathering regulations require finer attunement to recognize the importance of the practice to people's lives. Regulations should be tailored to the plant part harvested and the impact of harvest on plant populations, while taking into account any adverse impacts commercial or recreational gathering may have on subsistence users. Viewing non-timber forest



products as a revenue stream in need of oversight and policing action can create a hostile dynamic. It may ultimately cost agencies like the Forest Service more income to implement and enforce NTFP regulations than it receives in fees. My research found that the primary reasons gatherers engage in their practice has little to do with money. Therefore, regulatory agencies need to move beyond using only an economic lens when thinking about the regulation of gathering.

Another rationale for my research was to test how using Bourdieu's theories of practice and distinction could help shed new light on gatherers, gatherers' views of nature, and the trade of wild plants and fungi. In the past, the non-timber forest product literature has often portrayed gatherers as a homogenous group (McLain, 2000) and contrasted this group in opposition to other stakeholder groups such as land managers and/or regulatory authorities. Such work was useful, particularly when discussing power dynamics. Using Bourdieu's concept of habitus, I was able to demonstrate that gatherers have very diverse dispositions which lead to diverse views of nature, differing valuations of gathered products, and differing gathering practices. Using Bourdieu's theory of distinction, I showed how gathering is diverging into several different streams in Vermont. For example, rural, agrarian gathering practices persist in some pockets of the state, while in other areas new gatherers have transformed the practice from an agrarian way of life to a practice of recreation that focuses on the procurement of luxury wild foods. Lastly, by using Bourdieu's concept of capital, I was able to demonstrate how some individuals amass social and symbolic capital and subsequently use their capital to implement actions which ultimately re-arrange the entire gathering field. Given its practicality in uncovering and elucidating dynamics within the gathering field, I believe Bourdieu's theories could be brought

to bear on a variety of non-timber forest product research projects from other parts of the United States, as well as globally.

### **Areas for further research**

My research generated a number of questions which could serve as the basis for further research. Below, I briefly touch on some of the themes that I found most intriguing.

- **Further analysis of gathering access issues in Vermont.** My research indicates that older Rurals see the concept of the commons as central to their ability to maintain gathering practices. Formal posting in Vermont has doubled in the last thirty years, but how pervasive is informal posting? Are Vermont gatherers finding it more difficult to find and maintain access to gathering areas? Is the concept of the commons still alive, or is it fading along with Vermont's agrarian economy? Answering such questions would likely involve wide scale surveys of landowners as well as more interviews with gatherers specifically regarding their ability to access land. If privately owned land is becoming more difficult to access, will that shift a concentration of gathering onto state, federal and private forest industry lands? What might such a shift entail? Analysis of the data would likely benefit from the use of a political ecology lens. If Vermont passed a law requiring gatherers to obtain written permission to harvest products from landowners (as is now being proposed in Maine), how would such legislation affect gathering?
- **Diagramming the intersection between gathering and wider food trends in Vermont and beyond.** The study of foodways – the social, cultural and economic ways in which we obtain, prepare and invest food with meaning -is ascendant and garnering multidisciplinary scholarly attention. Using a foodways lens, how does the locavore movement or the Transition Town movement in Vermont interface with gathering? Can

gathering fulfill a meaningful role in local food security, particularly in times of crisis such as Peak Oil? Can wild foods withstand sudden trends in markets which promote local wild products? What happens to a species when it suddenly becomes elevated from a staple wild food to a luxury wild food due to taste or putative health benefits? What impacts do market explosions have on a species' habitat, on markets and pricing structures, and on gatherers? Will increased market demand for some species result in over-exploitation of naturally occurring populations? If so, how will gatherers and regulators adapt to such a scenario? Would cultivation of some popular wild species be feasible? For those species that cannot be cultivated, will harvest quotas or harvest moratoria need to be enforced, and if so, how?

- **Assessing the future interaction of the regulatory and gathering fields.** Gathering in Vermont takes places largely out of public view, and as such, is not, as yet, heavily regulated. However, I discovered some signs that indicate that this trend may not persist. The ginseng trade will be significantly impacted by Vermont's new rule requiring that all harvested root be ten years of age or older. A mushroom certification law, similar to the one passed in Maine, could thwart gatherer's abilities to market products in Vermont. One of my interviewees, Eric, who sells wild edibles at a farmers market, revealed that the host city for the market was considering asking the farmers market committee to take out extra liability insurance for venders of wild foods. The city was specifically concerned about the potential for lawsuits arising from poisonings associated with wild mushrooms sold at the market. One accidental wild mushroom poisoning could drastically change the current laissez-faire environment of wild edible sales in Vermont. Is government oversight needed? Would a gatherer-run credentialing program, as

proposed by Ida and Leonard, provide the public with enough assurance that wild species are properly identified? Will professionalization of the field - through fees, certification programs, written forms of permission to gather and bills of sale - exclude some gatherers from harvesting and marketing their products?

- **Piloting programs to enable gatherer access to lands.** The proposed law in Maine, which would make gathering of fiddleheads and other products illegal on private lands without owner consent, presumes that gatherers are both profit-oriented and ecologically destructive. My research indicates that profit is not a driving factor for most gatherers in Vermont. Furthermore, many gatherers I interviewed are very attached to the lands upon which they gather, and to the activity itself, and demonstrated a number of stewardship practices such as re-planting ginseng seed, harvesting only a portion of a stand, and rotating areas of harvest. As McLain et al. (2008) note, sometimes gathering policies need to include incentives (carrots) as well as disincentives (sticks). Woodland owners and gatherers could work together to pilot programs wherein gatherers would assist landowners with the inventorying of target species and help to determine harvest levels in return for access, or a trade of a portion of material collected.
- **Profiling the gathering practices of new immigrants to Vermont.** Vermont has a small but growing immigrant presence, particularly in the Burlington area. Recent immigrant groups include Bhutanese refugees, Somalis, and Bosnians, as well as a longer-settled Vietnamese community. Some of these immigrants have imported gathering traditions from their own countries. What function does gathering serve in Vermont's immigrant communities? Are immigrants learning new gathering skills from Vermont residents or teaching their skills to their new neighbors? Are immigrants able to

practice their gathering freely, or are they coming into conflict with established gatherers or authorities such as city park administrators?

- **Studying how gathering practices decline or die out.** This study has contributed to furthering our understanding of how Rurals and Neos obtain and maintain gathering practices. Yet it speaks little to why gathering practices atrophy or disappear. For example, I found two older interviewees who were once part of a larger community of Italian immigrants in central Vermont that carried out a vibrant tradition of porcini gathering. However, I was unable to find any younger members of the Italian community who continued to gather porcinis. They may still exist, but in much smaller numbers than in the past. According to Ida, Leonard, Joseph and Nancy, much of the decline in the porcini hunting tradition is due to habitat loss from development and logging. Is habitat loss the only factor responsible for the decline of the tradition? Why do children of other Rurals give up gathering when they grow older? Because they have moved to suburbs or cities? Because gathering takes too much time? Similarly, are children of Neos taking up the practice of gathering, or are they uninterested in continuing the practice?
- **Examining attention-deficit disorder in relation to gathering.** I found that gatherers in the literature, as well as gatherers in my interview pool, self reported, or were described by others, as exhibiting some symptoms of attention-deficit disorder. Medical research has determined that the genes association with attention-deficit disorder may have been positively selected for in hunter-gatherer societies because they conveyed an evolutionary advantage. Given the high incidence of attention-deficit disorder in children in the United States, further investigation of attention-deficit disorder's positive attributes in activities such as gathering appears warranted. If individuals with attention-deficit

disorder (ADD) are indeed more skilled at gathering than individuals without ADD symptoms, such a finding could prove useful in the design of interesting and engaging, outside-the-classroom, experiential learning curricula for those with ADD. Temple Grandin's (Grandin & Panek, 2013) recent book on autism stressed the need to move away from focusing on autism as a weakness. Rather, Grandin's argument goes, educators and researchers need to focus on areas where humans with autism can make positive, and often unexpected, contributions to society. A similar effort to stop viewing ADD as a weakness should likewise be made in education circles, and investigations into gathering as a potentially fruitful arena for engaging students with ADD warrants further examination.

### **Concluding thoughts**

Some gathering practices in Vermont appear to be on the wane, particularly the "old mountain man" traditions such as ginseng gathering and the making of "simples." Other gathering practices are being taken up by Neos, particularly gathering of wild mushrooms. To simply encapsulate, gathering as a way of life is on the decline and is being supplanted by gathering as a lifestyle.

Despite the nuances between the gathering practices of the Rurals and the Neos, gathering endures in Vermont, running like a braided river. Today, the strands of the Rurals' practices rarely intermix with the currents of the Neos' practices. And yet, if Penny and Mark's predictions of Peak Oil come to pass, perhaps future gathering in Vermont will resemble the past gathering practices of the Rurals. That is, in a post oil world, gathering may yet again represent one way of "getting by" in a difficult rural economy. It is conceivable that, to future researchers, Penny and Mark's students would demonstrate only slight divergences from the Rurals of old,

for example, by engaging in plant spirit communication, asking plants for permission to harvest, and giving thanks afterwards. In this way, one of the Neo strands of the gathering river may jump channels and rejoin with the Rurals' gathering currents. So too in time, perhaps, the Neo disposition to value wild edibles as "nutrient-dense," "full of micro nutrients," and "organic" may lose currency and appear as quaint to outside observers as the Rurals' use of wild cider vinegar as a medicinal. Today's distinctions in gathering practices may fade over time and what was once considered high practice may appear vulgar to future generations. Yet should gathering persist in Vermont, it will continue to offer humans immeasurable mental, emotional, and physical benefits, regardless of how it is practiced.

## Literature cited

- Abell, P. (Ed.). (1991). *Rational choice theory*. Schools of Thought in Sociology, Volume 8. Hants, UK: Edward Elgar Publishing.
- Acheson, J. (2006). Public access to privately owned land in Maine. *Maine Policy Review*, Fall, 18-30.
- Aiyelaja, A. & Ajewole, O. (2006). Non-timber forest products' marketing in Nigeria. A case study of Osun State. *Educational Research and Reviews*, 1 (2), 52-58.
- Albers, J. (2000). *Hands on the land: A history of the Vermont landscape*. Cambridge, MA: MIT Press.
- Alexander, S., Pilz, D., Weber, N., Brown, E. & Rockwell, V. (2002). Mushrooms, trees money: Value estimates of commercial mushrooms and timber in the Pacific Northwest. *Environmental Management*, 30 (1), 129-141.
- Alexander, L. (2008). *Meaning of place: Exploring long-term residents' attachment to the physical environment in northern New Hampshire*. (Doctoral dissertation). Keene, NH: Antioch University New England.
- Allegretti, M.H. (1990). Extractive reserves: An alternative for reconciling development and environmental conservation in Amazonia. In A.B. Anthony (Ed.), *Alternatives to deforestation: Steps toward sustainable use of the Amazon rain forest* (pp. 252-264). New York, NY: Columbia University Press.
- Allport, S. (2000). *The primal feast: Food, sex, foraging, and love*. New York, NY: Harmony Books.
- Alm, J., Blahna, D. & Chavez, D. (2008). Management assumptions and program realities: A case study of noncommercial fern gathering. In D. Chavez, P. Winter & J. Absher (Eds.), *Recreation visitor research: Studies of diversity* (pp. 87-96). (Gen. Tech. Rep. PSW-GTR-210). Albany, CA: USDA Forest Service.
- Anderson, J.A., Blahna, D.J. & Chavez, D.J. (2000). Fern gathering on the San Bernardino National Forest: Culture versus commercial values among Korean and Japanese participants. *Society and Natural Resources*, 13, 747-762.
- Anonymous. (1914). \$30,000 paid fern pickers. *American Fern Journal*, 4, 28-29.
- Appiah, K.A. (2008). *Experiments in ethics*. Cambridge, MA: Harvard University Press.
- Associated Press. (2008, August 22). N.H. has lowest birthrate in nation: US Census reports similar findings in other N.E. states. *Associated Press*. Retrieved from [http://articles.boston.com/2008-08-22//news/29271548\\_1\\_vermonters-workforce-birthrate](http://articles.boston.com/2008-08-22//news/29271548_1_vermonters-workforce-birthrate)



- Bailey, B. (1999). *Social and economic impacts of wild harvested products*. (Doctoral dissertation). Morgantown, WV: West Virginia University.
- Bailey, L.F. (1948). Leaf oils from Tennessee Valley conifers. *Journal of Forestry*, 46 (12), 882-889.
- Baird, I. & Dearden P. (2003). Biodiversity conservation and resource tenure regimes: A case study from northeastern Cambodia. *Environmental Management*, 32 (5), 541-550.
- Balooni, K., Lund, J., Kumar, C. & Inoue, M. (2010). Curse or blessing? Local elites in Joint Forest Management in India's Shwaliks. *International Journal of the Commons*, 4 (2) Retrieved from [www.thecommonsjournal.org](http://www.thecommonsjournal.org).
- Barr, C. (2005, June 3). Md. parks face prickly task of clipping a habit: Koreans illegally picking an old country herb from Montgomery Fields, flustering officials. *The Washington Post*, p. B5.
- Barratt, C. & Lybbert, T. (2000). Is bioprospecting a viable strategy for conserving tropical ecosystems? *Ecological Economics*, 34, 293-300.
- Barron, E. & Emery, M. (2012). Implications of variation in social-ecological systems for the development of U.S. fungal management policy. *Society and Natural Resources*, 25, 996-1011.
- Basure, H.S., Taru, J. & Mutangi, G.T. (2012). Land reform and natural resource management in Guruve District of Zimbabwe. *African Journal of Social Sciences*, 2 (3), 175-185.
- Baumflek, M., Emery, M. & Ginger, C. (2010). Culturally and economically important nontimber forest products of northern Maine. (Gen. Tech. Rep. NRS-68). Newtown Square, PA: USDA Forest Service.
- Beck, J. (1990). Traditional folk medicine in Vermont. In P. Benes (Ed.), *Medicine and healing* (pp. 34-43). The Dublin Seminar for New England Folklife Annual Proceedings 1990. Boston: Boston University.
- Becker, G. (1986). The economic approach to human behavior. In J. Elster (Ed.), *Rational Choice* (pp. 108-122). New York, NY: New York University Press.
- Belcher B., Ruiz-Pérez, M. & Achdiawan, R. (2005). Global patterns and trends in the use and management of commercial NTFPs: Implications for livelihoods and conservation. *World Development*, 33 (9), 1435-1452.
- Belcher, B. & Schreckenber, K. (2007). Commercialisation of non-timber forest products: A reality check. *Development Policy Review*, 25 (3), 355-377.
- Blatner, K.A. & Alexander, S. (1998). Recent price trends for nontimber forest products in the Pacific Northwest. *Forest Products Journal*, 48 (10), 28-34.

- Bohman, J. (1992). The limits of rational choice explanation. In J. Coleman & T. Farraro (Eds.), *Rational choice theory: Advocacy and critique* (pp. 207-228). Key issues in Sociological Theory #7. Newbury Park, CA: Sage.
- Bolduc, V. & Kessel, H. (2008). *Vermont in transition: A summary of social, economic and environmental trends*. Montpelier, VT: Vermont Council on Rural Development.
- Bolyard, J. (1981). *Medicinal plants and home remedies of Appalachia*. Springfield, IL: Charles C. Thomas.
- Bonfield, L.A. & Morrison, M.C. (1995). *Roxanna's children: The biography of a nineteenth-century Vermont family*. Amherst, MA: University of Massachusetts Press.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge, UK: Cambridge University Press.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Cambridge, MA: Harvard University Press.
- Bourdieu, P. (1986). The forms of capital. In J.G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-260). New York, NY: Greenwood Press.
- Bourdieu, P. (1989). Social space and symbolic power. *Sociological Theory*, 7 (1), 14-25.
- Bourdieu, P. (1990). *The logic of practice*. Stanford, CA: Stanford University Press.
- Bourdieu, P. (1991). *Language and symbolic power*. Cambridge, MA: Harvard University Press.
- Bourdieu, P. (1998). *Practical reason: On the theory of action*. Stanford, CA: Stanford University Press.
- Boutenko, S. (2013). *Wild edibles: A practical guide to foraging, with easy identification of 60 edible plants with 67 recipes*. Berkeley, CA: North Atlantic Books.
- Boyatzis, R. (1998). Transforming qualitative information: Thematic analysis and code development. Thousand Oaks, CA: Sage.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Brill, S. (1994). *Identifying and harvesting edible and medicinal plants in wild (and not so wild) places*. New York, NY: HarperCollins.
- Brill, S. (2010). *The wild vegan cookbook*. Boston, MA: Harvard Common Press.
- Browder, J. (1992). Social and economic constraints on the development of market-oriented extractive reserves in Amazon rain forests. In D. Nepstad & S. Schwartzman (Eds.), *Non-timber products from tropical forests: Evaluation of a conservation and*

- development strategy* (pp, 33-42). *Advances in Economic Botany*, Volume 9. Bronx, NY: New York Botanical Garden.
- Brown, K. & Lapuyade, S. (2001). A livelihood from the forest: Gendered visions of social, economic and environmental change in southern Cameroon. *Journal of International Development*, 13, 1131-1149.
- Brown, C. (2005, March 16). Regulating the wild mushroom; L.A. County halts sales at farmers markets. Could restaurants and supermarkets be next? *The Los Angeles Times*, p. F1.
- Bun, Y. & Bewang, I. (2005). *National analysis of trade-related instruments influencing trade in sandalwood and eaglewood: Applications and impacts on poverty alleviation and sustainable forest management in Papua New Guinea*. Rome, Italy: United Nations Food and Agriculture Organization.
- Burgener, M. (2007). *Trade measures – tools to promote the sustainable use of NWFP?: An assessment of trade-related instruments influencing the international trade in non-wood forest products and associated management and livelihood strategies*. Non-wood Forest Products Working Document No. 6. Rome, Italy: United Nations Food and Agriculture Organization.
- Burkhart, E., Jacobson, M. & Finley, J. (2012). Stakeholder perspective and experience with wild American ginseng (*Panax quinquefolius* L.) conservation efforts in Pennsylvania, U.S.A.: Limitations to a CITES driven, top-down regulatory approach. *Biodiversity and Conservation*, 21 (14), 3657-3679.
- Bushnell, M (Ed.). (1998). *A little girl's diary. Life on a farm in Stafford, Vermont – written by Alice Bushnell*. Stafford, VT: Self-published.
- Carlson, A.W. (1986). Ginseng: America's botanical drug connection to the Orient. *Economic Botany*, 40 (2), 2333-249.
- Carr, T. (1994). The Northern Forest economy. In C. Klyza & S. Trombulak (Eds.), *The future of the Northern Forest* (pp. 71-87). Hanover, NH: Middlebury College Press.
- Carroll, M.S., Blatner, K.A. & Cohn, P.J. (2003). Somewhere between: Social embeddedness and the spectrum of wild huckleberry harvest and use. *Rural Sociology*, 68 (3), 319-342.
- Cavender, A. (2003). *Folk medicine in southern Appalachia*. Chapel Hill, NC: University of North Carolina Press.
- Cavender, A. (2006). Folk medical uses of plant foods in southern Appalachia, United States. *Journal of Ethnopharmacology*, 108 (1), 74-84.
- Charnley, S., Fischer, P. & Jones, E. (2008). *Traditional and local ecological knowledge about forest biodiversity in the Pacific Northwest*. Gen. Tech. Rep. PNW-GTR-751. Portland, OR: USDA Forest Service.

- Chayanov, A.V. (1986). *On the theory of peasant economy*. Madison, WI: University of Wisconsin Press.
- Chipeniuk, R. (1995). Childhood foraging as a means of acquiring competent human cognition about biodiversity. *Environment and Behavior*, 27 (4), 490-512.
- Choocharoen, C., Schneider, A., Neef, A. & Georgiadis, P. (2013). Income options for the poorest of the poor: The case of cardamom in Northern Laos. *Small-scale Forestry*, 12 (2), 193-213.
- Clay, J. (1992). Some general principles and strategies for developing markets in North America and Europe for nontimber forest products. In M. Plotkin & L. Famolare (Eds.), *Sustainable harvest and marketing of rain forest products* (pp. 302-309). Washington, DC: Island Press.
- Cocks, M., López, C. & Dold, T. (2011). Cultural importance of non-timber forest products: Opportunities they pose for bio-cultural diversity in dynamic societies. In S. Shackleton, C. Shackleton & P. Shanley (Eds.), *Non-timber forest products in the global context* (pp. 107-128). Berlin: Springer-Verlag.
- Cole, A. & Knowles, J. (2001). *Lives in context: The art of life history research*. Walnut Creek, CA: AltaMira Press.
- Coleman, J. & Fararo, T. (Eds.). (1992). *Rational choice theory: Advocacy and critique*. Key issues in Sociological Theory #7. Newbury Park, CA: Sage.
- Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, 95-121.
- Conniff, R. (2011, October). Pan-seared hama hama sea rocket topped with toothwort roots and aged lichen. *Outside Magazine*. Retrieved from <http://www.outsideonline.com/outdoor-adventure/culinary/Pan-Seared-Hama-Hama-Sea-Rocket-Topped-with-Toothwort-Roots-and-Aged-Lichen.html>
- Cooley, O. (1985). *When Grandpa was a boy: Growing up on a Vermont farm*. Montpelier, VT: Vermont Historical Society.
- Cordell, H.K., Betz, C.J., Green, G.T., Mou, S., Leeworthy, V.R., Wiley, P.C., Barry, J.J. & Hellerstein, D. (2004). *Outdoor recreation for 21st century America*. Andover, MA: Venture Publishing.
- Coulibaly-Lingani, P., Tigabu, M., Savadogo, P., Oden, P. & Ouadba, J. (2009). Determinants of access to forest products in southern Burkina Faso. *Forest Policy and Economics*, 11 (7), 516-524.
- Creswell, J. & Marietta, R. (2002). Qualitative research. In D.C. Miller & N.J. Salkind, (Eds.), *Handbook of research design and social measurement* (pp. 145-180). Thousand Oaks, CA: Sage.

- Crockett, W.H. (1941). *Vermont maple sugar and syrup*. (Bulletin No. 38). Montpelier, VT: Vermont Department of Agriculture and the Vermont Bureau of Publicity.
- Cronkleton, P. & Pacheco, P. (2010). Changing policy trends in the emergence of Bolivia's Brazil nut sector. In S. Laird, R. McLain & R. Wynberg (Eds.), *Wild product governance: Finding policies that work for non-timber forest products* (pp. 15-41). London, UK: Earthscan.
- Cronon, W. (1983). *Changes in the land: Indians, colonists and the ecology of New England*. New York, NY: Hill and Wang.
- Crook, C. & Clapp, R. (1998). Is market-oriented forest conservation a contradiction in terms? *Environmental Conservation*, 25 (2), 131-145.
- Crosier, B. (1999). On a hillside farm, self-sufficiency helped a family survive the Great Depression. In D. Van Susteren (Ed.), *A Vermont century: Photographs and essays from the Green Mountain State* (p. 61). Rutland, VT: Rutland Herald and Barre-Montpelier Times Argus.
- Csikszentmihalyi, M. (1997). *Finding flow: The psychology of engagement with everyday life*. New York, NY: Basic Books.
- Cuba, L. & D. Hummon. (1993). Constructing a sense of home: Place affiliation and migration across the life cycle. *Sociological Forum*, 5 (4), 547-572.
- Cunningham, M., Cunningham, A. & Schippmann, U. (1997). *Trade in Prunus africana and the implementation of CITES*. Results of the R+D-Project 808 05 080. Bonn, Germany: Bundesamt für Naturschutz (BfN).
- Dahlberg, A. (2011). Public access rights in Sweden: A demonstration of cultural importance of forest and their products. In S. Shackleton, C. Shackleton & P. Shanelly (Eds.), *Non-timber forest products in the global context* (pp. 109-111). Berlin, Germany: Springer-Verlag.
- Dawson, A. (1986). *The gourmet gatherer: Or how to feed holiday guests without increasing the food budget*. Marshfield, VT: Self-published
- de Beer, J. & McDermott, M.J. (1996). *The economic value of non-timber forest products in Southeast Asia*. Amsterdam, The Netherlands: IUCN.
- de Certeau, M. (1988). *The practice of everyday life*. Berkeley, CA: University of California Press.
- Dick, R.E. (1996). Subsistence economics: Freedom from the marketplace. *Society and Natural Resources*, 9, 19-26.
- Dietz, T. & Stern, P.C. (1995). Toward a theory of choice: Socially embedded preference construction. *Journal of Socio-Economics*, 24 (2), 261-279.

- Dove, M. R. (1994). *Marketing the rainforest: 'Green' panacea or red herring?* Asia Pacific Issues, No. 13. Honolulu, HI: East-West Center.
- Dutfield, G. (2000). *Intellectual property rights, trade and biodiversity*. London, UK: Earthscan.
- Dutfield, G. (2004). *Intellectual property, biogenetic resources and traditional knowledge*. London, UK: Earthscan.
- Dzen, G. (2012, September 8). The best beer town in New England: Head to Waterbury, Vermont to experience exceptional IPAs and other pours. *The Boston Globe*. Retrieved from <http://www.boston.com/travel/new-england/vermont/2012/09/12/the-best-beer-town-new-england/iM7aAmKovRLiEfeuaQTsoO/story.html>
- Eisenberg, D. & Campbell, B. (2011). The evolution of ADHD: Social context matters. *San Francisco Medicine*, 84 (8), 21-22.
- Elias, T. & Dykeman, P. (2009). *Edible wild plants: A North American field guide to over 200 natural foods*. New York, NY: Sterling Publishing Company.
- Elster, J. (Ed.). (1986). *Rational Choice*. New York, NY: New York University Press.
- Emerson, R.M., Fretz, R.I & Shaw, L.L. (1995). *Writing ethnographic fieldnotes*. Chicago, IL: University of Chicago Press.
- Emery, M. (1998). *Invisible livelihoods: Non-timber forest products in Michigan's Upper Peninsula*. (Doctoral dissertation). New Brunswick, NJ: Rutgers University.
- Emery, M. (2001). Who knows? Local non-timber forest product knowledge and stewardship practices in Northern Michigan. In M. Emery and R. McLain (Eds.), *Non-timber forest products: Medicinal herbs, fungi, edible fruits and nuts, and other natural products from the forest* (pp. 123-139). Binghamton, NY: Hawthorn Press.
- Emery, M., Ginger, C., Newman, S. & Giamusso, M. (2003). *Special forest products in context: Gatherers and gathering in the Eastern United States*. (Gen. Tech. Rep. NE-306). Newtown Square, PA: USDA Forest Service.
- Emery, M., Ginger, C. & Chamberlain, J. (2006). Migrants, markets and the transformation of natural resources management: Galax harvesting in western North Carolina. In H. Smith & O. Furuseth (Eds.), *Latinos in the New South: Transformations of place* (pp. 69-88). Burlington, VT: Ashgate Publishing Company.
- Emery, M., Martin, S. & Dyke, A. (2006). *Wild harvests from Scottish woodlands: Social, cultural and economic values of contemporary non-timber forest products*. Edinburgh, Scotland: Forestry Commission.
- Emery, M., Pierce, A. & Schroeder, R. (2004). Criterion 6, indicator 47: Area and per cent of forest land used for subsistence purposes. In D.R. Darr (Coordinator), *Data report: A*

- supplement to the national report on sustainable forests – 2003*. Report FS-766A. Washington, DC: USDA Forest Service.
- Emery, M. & Pierce, A. (2005). Interrupting the telos: Locating subsistence in contemporary US forests. *Environment & Planning A*, 37 (6), 981-993.
- Endress, B., Gorchov, D., Peterson, M. & Serrano, E. (2004). Harvest of the palm *Chamaedorea*, its effects on leaf production, and implications for sustainable management. *Conservation Biology*, 18 (3), 822-830.
- Evans, M. (1996). A contextual classification of “intrinsically wild” food species. *Biopolicy Journal*, 1: Paper 3. Retrieved from [www.bioline.org.br](http://www.bioline.org.br)
- Faugier, J. & Sargeant, M. (1997). Sampling hard to reach populations. *Journal of Advanced Nursing*, 26, 790-797.
- Fetterman, D.M. (1998). *Ethnography step by step*. (2nd ed.). Thousand Oaks, CA: Sage.
- Fine, G.A. (1998). *Morel tales: The culture of mushrooming*. Cambridge, MA: Harvard University Press.
- Finger, M. & Schuler, P. (Eds.). (2004). *Poor people’s knowledge: Promoting intellectual property in developing countries*. Oxford, UK: Oxford University Press.
- Fish, C. (1995). *In good hands: The keeping of a family farm*. New York, NY: Kodansha.
- Foderaro, L. (2011, July 20). Enjoy park greenery, city says, but not as salad. *The New York Times*, p. A1.
- Foucault, M. (1979). *Discipline and punish: The birth of the prison*. New York, NY: Vintage Books.
- Freed, J. (1997). The future of the special forest products industry. *Western Forester*, 42 (6), 6-7.
- Fries, C. (2009). Bourdieu’s reflexive sociology as a theoretical basis for mixed methods research: An application to complementary and alternative medicine. *Journal of Mixed Methods Research*, 3 (4), 326-348.
- Fritschel, D. (2003). Patent medicines from the Green Mountain State. *Bottles and Extras* (official magazine of the Federation of Historical Bottle Collectors), Summer, 42-48.
- Funnell, R. (2008). Tracing variations within ‘rural habitus’: An explanation of why young men stay or leave isolated rural towns in southwest Queensland. *British Journal of Sociology of Education*, 29 (1), 15-24.
- Gardon, A. (1998). *The wild food gourmet: Fresh and savory food from nature*. Buffalo, NY: Firefly Books.

- Geertz, C. (1973). Thick description: Toward an interpretive theory of culture. In C. Geertz, *The Interpretation of Cultures: Selected Essays* (pp. 3-30). New York, NY: Basic Books.
- Gibbons, E. (1965). *Stalking the wild asparagus*. New York, NY: David McKay Company.
- Gibbons, E. (1974). *Stalking the good life: My love affair with nature*. New York, NY: David McKay Company.
- Gibson-Graham, J.K. (1996). *The end of capitalism (as we knew it): A feminist critique of political economy*. Oxford, UK: Blackwell.
- Ginger, C., Emery, M., Baumflek, M. & Putnam, D. (2012). Access to natural resources on private property: Factors beyond right of entry. *Society and Natural Resources*, 25, 700-715.
- Glesne, C. (1999). *Becoming qualitative researchers: An introduction*. (2nd ed.). New York, NY: Longman.
- Godoy, R.A. & Bawa, K.S. (1993). The economic value of sustainable harvest of plants and animals from the tropical forest: assumptions, hypotheses, and methods. *Economic Botany*, 47 (3), 215-219.
- Godoy, R. & Lubowski, R. (1992). Guidelines for the economic valuation of nontimber tropical-forest products. *Current Anthropology*, 33 (4), 423-433.
- Godoy, R., Lubowski, R. & Markandya, A. (1993). A method for the economic valuation of non-timber tropical forest products. *Economic Botany*, 47 (3), 220-233.
- Goetzman, K. (2010, February 26). Wild foraging for food and wisdom. *Utne Reader*. Retrieved from <http://www.utne.com/Environment/Wild-Foraging-for-Food-and-Wisdom-6760.aspx#axzz2dJgIW9pS>
- Grandin, T. & Panek, R. (2013). *The autistic brain: Thinking across the spectrum*. Boston, MA: Houghton Mifflin Harcourt.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91 (3), 481-510.
- Green, C. & Scott, S. (2010). *The wild table: Seasonal foraged food and recipes*. New York, NY: Viking Studio, Penguin Group.
- Greenbaum, A. (2005). Nature connoisseurship. *Environmental Values*, 14, 389-407.
- Greene, S. (2004). Indigenous people incorporated? Culture as politics, culture as property in pharmaceutical bioprospecting. *Current Anthropology*, 45 (2), 211-237.
- Greene, S., Hammett, A. & Kant, S. (2000). Non-timber forest products marketing systems and market players in Southwest Virginia. *Journal of Sustainable Forestry*, 11 (3), 19-39.



- Grimes, A., Loomis, S., Jahnige, P., Burnham, M., Onthank, K., Alrarc, R., Palacios Cuenca, W. Ceron Martinez, C., Neill, D., Balick, M., Bennett, B. & Mendelsohn, R. (1994). Valuing the rain forest: The economic value of nontimber forest products in Ecuador. *Ambio*, 23 (7), 405-410.
- Guariguata, M., Cronkleton, P., Shanley, P. & Taylor, P. (2008). The compatibility of timber and non-timber forest product extraction and management. *Forest Ecology and Management*, 256 (7), 1477-1481.
- Gubbi, S. & MacMillan, D. (2008). Can non-timber forest products solve livelihood problems? A case study from Periyar Tiger Reserve, India. *Oryx*, 42 (2), 222-228.
- Guenther, E. (1973). *The essential oils*. Huntington, NY: Robert E. Krieger Publishing Company.
- Guest, G., Bunce, A. & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18 (1), 59-82.
- Hahn, S. (1982). Hunting, fishing, and foraging: Common rights and class relations in the Postbellum South. *Radical History Review*, 26, 37-64.
- Halperin, R. (1990). *The livelihood of kin: Making ends meet "the Kentucky way."* Austin, TX: University of Texas Press.
- Hammersley, M. & Atkinson, P. (1995). *Ethnography: Principles in practice*. (2nd ed.). London, UK: Routledge.
- Hand, S. (2003). History. In J. Duffy, S. B. Hand & R.H. Orth (Eds.), *The Vermont encyclopedia* (pp. 8-15). Hanover, NH: University Press of New England.
- Hansis, R. (1998). A political ecology of picking: Non-timber forest products in the Pacific Northwest. *Human Ecology*, 26 (1), 67-86.
- Harris, L. (2011). The first localvores: Vermont's early Abenaki ate many of the same local foods we do today. *Vermont's Local Banquet*, 15, 10-11.
- Haviland, W.A. & Power, M.W. (1994). *The original Vermonters: native inhabitants, past and present*. Hanover, NH: University Press of New England.
- He, J. (2010). Globalised forest-products: Commodification of the matsutake mushroom in Tibetan villages, Yunnan, Southwest China. *International Forestry Review*, 12 (1), 27-37.
- Herbert, S.G. (2007). Cedar oil man: Distilling the essence of the Northeast Kingdom. *Vermont Life*, 61 (4), 50-53.
- Heubach, K., Wittig, R., Nuppenau, E & Hahn, K. (2011). The economic importance of non-timber forest products (NTFPs) for livelihood maintenance of rural west African communities: A case study from northern Benin. *Ecological Economics*, 70 (11), 1991-2001.

- Hewes, E. (1833). *Female nurse*. Bennigton, VT: Asa G. Hewes.
- Hinrichs, C.C. (1998). Sideline and lifeline: The cultural economy of maple syrup production. *Rural Sociology*, 63 (4), 507-532.
- Holstein, J.A. & Gubrium, G.F. (2002). Active Interviewing. In D. Weinberg (Ed.), *Qualitative Research Methods* (pp. 112-126). Oxford, UK: Blackwell.
- Homma, A.K.O. 1992. The dynamics of extraction in Amazonia: A historical perspective. In D. Nepstad & S. Schwartzman (Eds.), *Non-timber forest products from the tropical forests: Evaluation of a conservation and development strategy* (pp. 23-31). Advances in Economic Botany # 9. Bronx, NY: New York Botanical Garden.
- Howard, A. (2000). When oil ran like sugar. *The Transcript* (Morrisville, VT), 1, 3.
- Hubbard, E. (2004). *Salt pork and apple pie: A collection of essays and photographs about Vermont old-timers*. Montpelier, VT: RavenMark.
- Hufford, M. (1997). American ginseng and the culture of the commons. *Orion*, 16 (4), 11-14.
- Hufford, M. (2006). Molly mooching on Bradley Mountain: The aesthetic ecology of Appalachian morels. *Gastronomica*, 6 (2), 49-56.
- Humphreys, D. (2004). Redefining the issues: NGO influence on international forest negotiations. *Global Environmental Politics*, 4 (2), 51-74.
- Hurley, P. & Halfacre, A. (2011). Dodging alligators, rattlesnakes, and backyard docks: A political ecology of sweetgrass basket-making and conservation in the South Carolina Lowcountry, USA. *GeoJournal*, 76, 383-399.
- Hyde, L. (1983). *The gift: Imagination and the erotic life of property*. New York, NY: Random House.
- Hysmith, K. (2013, May 28). Gallery 263 enlists chef to forage for its fund-raiser. *Boston Globe*. Retrieved from [www.bostonglobe.com/lifestyle/food-dining/2013/05/28/dinner-procured-from-land-and-sea/k0fvfyGmxKtunoz8O52EEO/story.html?s\\_campaign=8315](http://www.bostonglobe.com/lifestyle/food-dining/2013/05/28/dinner-procured-from-land-and-sea/k0fvfyGmxKtunoz8O52EEO/story.html?s_campaign=8315)
- Iqbal, M. (1995). *Trade restrictions affecting international trade in non-wood forest products*. Non-Wood Forest Products No. 8. Rome, Italy: United Nations Food and Agriculture Organization.
- Jacobsen, R. (2010). *American terroir: Savoring the flavors of our woods, waters, and fields*. New York, NY: Bloomsbury.
- Jacoby, K. (2001). *Crimes against nature: Squatters, poachers, thieves and the hidden history of American conservation*. Berkeley, CA: University of California Press.
- Jarvis, D.C. (1958). *Folk medicine: A Vermont doctor's guide to good health*. New York, NY: Henry Holt.

- Jensen, A. (2009). Valuation of non-timber forest products value chains. *Forest Policy and Economics*, 11 (1), 31-41.
- Joffe, H. (2011). Thematic analysis. In D. Harper & A. Thompson (Eds.), *Qualitative research methods for clinical health and psychotherapy: A guide for students and practitioners* (pp. 209-223). Oxford, UK: Wiley Blackwell.
- Johnson, C.W. (1980). *The nature of Vermont: Introduction and guide to a New England environment*. Hanover, NH: The University Press of New England.
- Jones, E. (2002). *The political ecology of wild mushroom harvester stewardship in the Pacific Northwest*. (Doctoral dissertation). Amherst, MA: University of Massachusetts.
- Jones, E. & Lynch, K. (2002). The relevance of sociocultural variables to nontimber forest product research, policy and management. In E. Jones, R. McLain & J. Weigand (Eds.), *Nontimber forest products in the United States* (pp. 26-51). Lawrence, KS: University of Kansas Press.
- Jones, E. & Lynch, K. (2007). Nontimber forest products and biodiversity management in the Pacific Northwest. *Forest Ecology and Management*, 246, 29-37.
- Jones, E. & Lynch, K. (2008). Integrating commercial nontimber forest product harvesters into forest management. In E. Donoghue & V. Sturtevant (Eds.), *Forest community connections: Implications for research, management and governance* (pp. 143-161). Washington, DC: Resources for the Future.
- Jones, E., McLain, R. & Weigand, J. (Eds.) 2002. *Nontimber forest products in the United States*. Lawrence, KS: University Press of Kansas.
- Judd, R.W. (1997). *Common lands, common people: The origins of conservation in northern New England*. Cambridge, MA: Harvard University Press.
- Kalish, M.A. (2007). *Little heathens: Hard times and high spirits on an Iowa farm during the Great Depression*. New York, NY: Bantum Dell.
- Kamau, E. & Winter, G. (2009). *Genetic resources, traditional knowledge and the law: Solutions for access and benefit sharing*. London, UK: Earthscan.
- Kaplan, R. & Kaplan, S. (1989). *The experience of nature: A psychological perspective*. New York, NY: Cambridge University Press.
- Kaplan, S. (1995). The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology*, 15, 169-182.
- Kardell, L. (1980). Forest berries and mushrooms – an endangered resource? *Ambio*, 9 (5), 241-247.
- Kawamura, H. (2004). Symbolic and political ecology among contemporary Nez Perce Indians in Idaho, USA: Functions and meanings of hunting, fishing and gathering practices. *Agriculture and Human Values*, 21, 157-169.

- Kebede, R. (2009, March 24). Newly thrifty Americans go foraging. *Reuters*. Retrieved from <http://www.reuters.com/article/2009/03/24/us-usa-consumers-thrift-idUSTRE52N0X820090324>
- Kidd, J. & Barascamp, W. (2004). Benefits of gardening to the well-being of New Zealand gardeners. *Acta Horticulturae*, 639, 103-112.
- Klyza, C.M & Trombulak, S.C. (1999). *The story of Vermont: A natural and cultural history*. Hanover, NH: Middlebury College Press.
- Koelling, M. & Heiligmann, R. (Eds.). (1996). North American maple syrup producers manual. (Ohio State University Extension, Bulletin 856). Columbus, OH: The Ohio State University.
- Koerper, H. & Kolls, A.L. (1999). The silphium motif adorning ancient Libyan coinage: Marketing a medicinal plant. *Economic Botany*, 53 (2), 133-143.
- Kramer, J. (2011, November 21). The food at our feet: Why is foraging all the rage? *The New Yorker*. Retrieved from [http://www.newyorker.com/reporting/2011/11/21/111121fa\\_fact\\_kramer](http://www.newyorker.com/reporting/2011/11/21/111121fa_fact_kramer)
- Kursar, T., Caballero-George, C., Capson, T., Cubilla-Rios, L., Gerwick, W., Gupta, M., Ibanñez, A., Linington, R., McPhail, K., Ortega-Barria, E., Romero, L. Solis, P. & Coley, P. (2006). Securing economic benefits and promoting conservation through bioprospecting. *BioScience*, 56 (12), 1005-1012.
- Labaree, R. (2006). Encounters with the library: Understanding experience using the life history method. *Library Trends*, 55 (1), 121-139.
- Laird, S. (1995). *The natural management of tropical forests for timber and non-timber products*. (OFI Occasional Papers, No. 49). Oxford, UK: Oxford Forestry Institute.
- Laird, S. (Ed.). (2002). *Biodiversity and traditional knowledge: Equitable partnerships in practice*. London, UK: Earthscan.
- Laird, S., McLain, R. & Wynberg, R. (Eds.). (2010). *Wild product governance: Finding policies that work for non-timber forest products*. London, UK: Earthscan.
- Laird, S. & Wynberg, R. (2008). *Access and benefit sharing in practice: Trends in partnerships across sectors*. (Volumes I, II and III, CBD Technical Series 38). Montreal, Quebec: Secretariat on the Convention on Biological Diversity.
- Lampman-Larivee, L. (2009). VT Women: Grandma Lampman. (Vermont Public Radio, Women's History Month, broadcast March 27, 2009). Retrieved from [www.vpr.net/episode/45744/](http://www.vpr.net/episode/45744/)
- Lange, D. (2006). International trade in medicinal and aromatic plants. In R. Bogers, L. Craker & D. Lange (Eds.), *Medicinal and aromatic plants* (pp. 155-170). (Wageningen UR Frontis Series, Vol. 17). Dordrecht, Holland: Springer-Verlag.

- Lange, Dagmar & Schippmann, U. (1997). *Trade survey of medicinal plants in Germany: A contribution to international plant species conservation*. Bonn, Germany: Bundesamt für Naturschutz (BfN).
- Larrère, R. & de la Soudière, M. (1984). *Cueillir la montagne: plantes, fleurs, champignons en Gévaudan, Auvergne et Limousin. L'Homme et la Nature*. Lyon, France: La Manufacture.
- Larsen, H., Olsen, C. & Boon, T. (2000). The non-timber forest policy process in Nepal: Actors, objectives and power. *Forest Policy and Economics*, 1 (3-4), 267-281.
- Larson, A. & Ribot, J. (2007). The poverty of forest policy: Double standards on an uneven playing field. *Sustainability Science*, 2 (2), 189-204.
- Lawrence, J. & Martin, R. (1993). *Sweet maple: Life, lore and recipes from the sugarbush*. Shelburne, VT: Chapters Books.
- Lebentritt, J. (1974). Fiddleheading. *Vermont Life*, 28 (3), 20-23.
- LeCompte, M.D. & Schensul, J.J. (1999). *Designing and conducting ethnographic research*. (Ethnographer's Toolkit, Volume 1). Walnut Creek, CA: AltaMira Press.
- Lee, W.S. (1938). Fern picking in Vermont. *Yankee*, 4 (10), 38-39.
- Levitt, A. (2009, July 1). Indian summer: Native food rises again at the Intervale. *Seven Days* (Burlington, VT), pp. B6, B7.
- Lewis, C. (1996). *Green nature/human nature: The meaning of plants in our lives*. Urbana, IL: University of Illinois Press.
- Lincoff, G.H. (1981). *National Audubon Society field guide to North American mushrooms*. New York, NY: Chanticleer Press.
- Lombard, C. & du Plessis, P. (2003). The impact of the proposal to list devil's claw on Appendix II of CITES. In S. Oldfield (Ed.), *The trade in wildlife: Regulation for conservation* (pp. 146-152). London, UK: Earthscan.
- Long, S. (1995). The lure of sugaring. *Vermont Woodlands*, 2 (1), 14-16.
- Lorinc, J. (2011). Urban gleanings goes mainstream. *The Atlantic Cities*. Retrieved from: <http://www.theatlanticcities.com/arts-and-lifestyle/2011/09/urban-gleaning-movement/151/>
- Louv, R. (2005). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill, NC: Algonquin Books.
- Low, S. & Altman, I. (Eds.). 1992. *Place attachment: A conceptual inquiry*. (Vol. 12). New York, NY: Plenum Press.

- Lubrosky, M. (1994). The identification and analysis of themes and patterns. In J. Gubrium & A. Sanker (Eds.), *Qualitative methods in aging research* (pp. 189-210). Thousand Oaks, CA: Sage.
- Lupkin, S. (2012, November 28). Mushrooms kill fourth California senior: U.S. cases on rise. *ABC News*. Retrieved from <http://abcnews.go.com/Health/mushrooms-kill-fourth-california-senior-us-cases-rise/story?id=17826740>
- Lynch, K. & McLain, R. (2003). *Access, labor, and wild floral greens management in western Washington's forests*. (Gen. Tech. Rep. PNW-GTR-585). Portland, OR: USDA Forest Service.
- Mabey, R. (2007). *Nature cure: A story of depression and healing*. Charlottesville, VA: University of Virginia Press.
- Maille, P. (2001). *A non-timber forest product bibliography emphasizing Central Africa*. Washington, DC: US Agency for International Development, Central Africa Program for the Environment, USDA Forest Service.
- Marshall, E., Schreckenberg, K. & Newton, A. (Eds.). (2006). *Commercialization of non-timber forest products: Factors influencing success. Lessons learned from Mexico and Bolivia and policy implications for decision-makers*. Cambridge, UK: United Nations Environment Program, World Conservation Monitoring Center.
- Mater Engineering. (n.d.) *Value-added and special forest products markets research report for North Fork, CA*. Corvallis, OR: Mater Engineering.
- McAdams, D.P. (2006). *The redemptive self: Stories Americans live by*. New York, NY: Oxford University Press.
- McBride, S. (2004). *Political juxtapositions: Wildcrafting among herb diggers in Graham County, North Carolina (1900-2004)*. (Doctoral dissertation). Athens, GA: University of Georgia.
- McLain, R. (2000). *Controlling the forest understory: Wild mushroom politics in central Oregon*. (Doctoral dissertation). Seattle, WA: Department of Forest Resources, University of Washington.
- McLain, R., Alexander, S. & Jones, E. (2008). *Incorporating understanding of informal economic activity in natural resource and economic development policy*. (Gen. Tech. Rep. PNW-GTR-755). Portland, OR: USDA Forest Service.
- McLain, R., Christensen, H. & Shannon, M. (1998). When amateurs are the experts: Amateur mycologists and wild mushroom politics in the Pacific Northwest, USA. *Society and Natural Resources*, 11, 615-626.
- McLain, R. & Jones, E. (2001). Expanding harvester/buyer participation in Pacific Northwest forest policy. In M. Emery & R. McLain (Eds.), *Non-timber forest products: Medicinal*

- herbs, fungi, edible fruits and nuts, and other natural products from the forest* (pp. 147-162). Binghamton, NY: Hawthorne Press.
- McLain, R. & Jones, E. (2005). *Nontimber forest products management on national forests in the United States*. (Gen. Tech. Rep. PNW-GTR-655). Portland, OR: USDA Forest Service.
- McLain, R. & Lynch, K. (2010). Managing floral greens in a globalized economy: Resource tenure, labor relations and immigration policy in the Pacific Northwest, USA. In S. Laird, R. McLain & R. Wynberg (Eds.), *Wild product governance: Finding policies that work for non-timber forest products* (pp. 265-285). London, UK: Earthscan.
- McLain, R., MacFarland, K., Brody, L., Hebert, J., Hurley, P., Poe, M., Buttolph, L., Gabriel, N., Dunza, M., Emery, M., & Charnley, S. (2012). *Gathering in the city: An annotated bibliography and review of the literature about human-plant interactions in urban ecosystems*. (Gen. Tech. Rep. PNW-GTR-849). Portland, OR: USDA Forest Service.
- McLellan, D. (2006). *Karl Marx: A biography*. (4th ed.). Basingstoke, UK: Palgrave Macmillan.
- McManis, C. (Ed.). (2007). *Biodiversity and the law: Intellectual property, biotechnology and traditional knowledge*. London, UK: Earthscan.
- McPartland, J.M. & Pruitt, P. (1998). Alternative medicine in nineteenth-century Vermont. *Vermont History*, 66, 102-111.
- Meeks, H. (1986a). *Time and change in Vermont: A human geography*. Chester, CT: The Globe Press.
- Meeks, H. (1986b). *Vermont's land and resources*. Shelburne, VT: The New England Press.
- Michon, G. (2006). NTFP development and poverty alleviation: Is the policy context favourable? In J. Pfund & P. Robinson (Eds.), *Non-timber forest products: Between poverty alleviation and market forces* (pp. 20-26). Zurich, Switzerland: SECO.
- Miles, M. & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.
- Miller, J. (1992). *Deer camp: Last light in the Northeast Kingdom*. Cambridge, MA: MIT Press.
- Mishler, E.G. (1986). *Research interviewing: Context and narrative*. Cambridge, MA: Harvard University Press.
- Mogelon, R. (2001). *Wild in the kitchen: Recipes for wild fruits, weeds, and seeds*. Lanham, MD: M. Evans and Company.
- Morrissey, C.T. (1981). *Vermont: A history*. New York, NY: W.W. Norton.

- Morselli, M. (2003). Maple trees, maple research and maple products. In J. Duffy, S. B. Hand & R.H. Orth (Eds.), *The Vermont encyclopedia* (p. 197). Hanover, NH: University Press of New England.
- Muir, P.S., Norman, K.N. & Sikes, K.G. (2006). Quantity and value of commercial moss harvest from forests of the Pacific Northwest and Appalachian regions of the U.S. *The Bryologist*, 109 (2), 197-214.
- Mulliken, T. & Crofton, P. (2008). *Review of the status, harvest, trade and management of seven Asian CITES-listed medicinal and aromatic plant species*. Bonn, Germany: Bundesamt für Naturschutz (BfN).
- Mulliken, T. (2009). *The role of CITES in controlling the international trade in forest products: Implications for sustainable forest management*. (Non-Wood Forest Products Working Document No. 7). Rome, Italy: United Nations Food and Agriculture Organization.
- Muth, R.M., Dick, R.E. & Blanchard, K.A. (2001). Subsistence use of wildlife and native peoples' wildlife issues. In D.J. Decker, T.L. Brown & W.F. Siemer (Eds.), *Human dimensions of wildlife management in North America* (pp. 329-351). Bethesda, MD: The Wildlife Society.
- Nabhan, G.P. (2001). *Coming home to eat: The pleasures and politics of local food*. New York, NY: W.W. Norton.
- Nash, H. (1975). *Royalton*. Lunenburg, VT: Stinehour Press.
- Nepstad, D.C., Brown, F., Luz, L., Alechandra, A. & Viana, V. (1992). Biotic impoverishment of Amazonian forests by rubber tappers, loggers and cattle ranchers. In D. Nepstad & S. Schwartzman (Eds.), *Non-timber products from tropical forests: Evaluation of a conservation and development strategy* (pp 1-15). (Advances in Economic Botany, Volume 9). Bronx, NY: New York Botanical Garden.
- Neumann, R. & Hirsch, E. (2000). *Commercialisation of non-timber forest products: Review and analysis of research*. Bogor, Indonesia: CIFOR.
- Newing, H. & Harrop, S. (2000). European health regulations and Brazil nuts: Implications for biodiversity conservation and sustainable rural livelihoods in the Amazon. *Journal of International Wildlife Law and Policy*, 3 (2), 109-124.
- Newman, S. (2003). Mary Girard, floral greens gatherer – Vermont. In M.R. Emery, C. Ginger, S. Newman & M.R.B. Giammusso, *Special forest products in context: Gatherers and gathering in the Eastern United States* (pp. 37-38). (Gen. Tech. Rep. NE-306). Newtown Square, PA: USDA Forest Service.
- Northeastern Wood Utilization Council. (1946). *Extractives from northeastern woods*. (Bulletin No. 9). New Haven, CT: Northeastern Wood Utilization Council.
- Oberthür, S. & Rosendal, G. (In press). *Global governance of genetic resources: Access and benefit sharing after the Nagoya Protocol*. London, UK: Earthscan.



- O'Brien, L. (2006). "Strengthening heart and mind:" Using woodlands to improve mental and psychological well-being. *Unasylva*, 57, 56-61.
- Ojha, H., Cameron, J. & Kumar, C. (2009). Deliberation or symbolic violence? The governance of community forestry in Nepal. *Forest Policy and Economics*, 11 (5-6), 365-374.
- Olmos, S. (1999). Non-wood forest products: Utilization and income generation in the Czech Republic, Finland and Lithuania. *Unasylva* 50 (3), 27-33.
- Pandit, B. & Thapa, G. (2003). A tragedy of non-timber forest resources in the mountain commons of Nepal. *Environmental Conservation*, 30 (3), 283-292.
- Patton, D.Q. (2001). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.
- Paxson, H. (2006). Artisanal cheese and economies of sentiment in New England. In R. Wilk (Ed.), *Fast food/slow food: The cultural economy of the global food system* (pp. 201-218). Lanham, MD: AltaMira Press.
- Peck, J. & Christy, J. (2006). Putting the stewardship concept into practice: commercial moss harvest in Northwestern Oregon, USA. *Forest Ecology and Management*, 225, 225-233.
- Peluso, N. (1992). *Rich forests, poor people: resource control and resistance in Java*. Berkeley, CA: University of California Press.
- Pendelton, L. (1992). Trouble in paradise: Practical obstacles to nontimber forestry in Latin America. In M. Plotkin & L. Famolare (Eds.), *Sustainable harvest and marketing of rain forest products* (pp. 252-262). Washington, DC: Island Press.
- Perlin, J. (1991). *A forest journey: The role of wood in the development of civilization*. Cambridge, MA: Harvard University Press.
- Person, W.S. (1994). *American ginseng: Green gold*. Asheville, NC: Bright Mountain Books.
- Peters, C., Gentry, A. & Mendelsohn, R. (1989). Valuation of an Amazonian rainforest. *Nature*, 339, 655-656.
- Peters, C. (1994). *Sustainable harvest of non-timber plant resources in tropical moist forest: An ecological primer*. Washington, DC: Biodiversity Support Program.
- Peterson, L.A. (1977). *A field guide to edible wild plants of Eastern and Central North America*. Boston, MA: Houghton Mifflin Company.
- Pierce, A. (2002a). Social issues. In P. Shanley, A. Pierce, S. Laird & A. Guillen (Eds.), *Tapping the green market: certification and management of non-timber forest products* (pp. 283-298). London, UK: Earthscan.
- Pierce, A. (2002b). Fiddlehead ferns (*Matteuccia struthiopteris*). In P. Shanley, A. Pierce, S. Laird & A. Guillen (Eds.), *Tapping the green market: certification and management of non-timber forest products* (pp. 156-161). London, UK: Earthscan.

- Pierce, A. (2009). *NTFP policy and law bibliography*. Bristol, VT: People and Plants International.
- Pierce, A. (2010). NTFP law and policy literature: Lie of the land and areas for further research. In S. Laird, R. McLain & R. Wynberg (Eds.), *Wild product governance: Finding policies that work for non-timber forest products* (pp. 375-384). London, UK: Earthscan.
- Pierce, A. & Burgener, M. (2010). Laws and policies impacting trade in NTFPs. In S. Laird, R. McLain & R. Wynberg (Eds.), *Wild product governance: Finding policies that work for non-timber forest products* (pp. 327-342). London, UK: Earthscan.
- Pierce, A. & Laird, S. (2003). In Search of Comprehensive Standards for Non-Timber Forest Products in the Botanicals Trade. *International Forestry Review*, 5 (2), 138-147.
- Pilz, D. (1996). *Managing forest ecosystems to conserve fungus diversity and sustain wild mushroom harvests*. (Gen. Tech. Rep. PNW-GTR-371). Portland, OR: USDA Forest Service.
- Pilz, D. & Molina, R. (2002). Commercial harvests of edible mushrooms from the forests of the Pacific Northwest United States: Issues, management, and monitoring for sustainability. *Forest Ecology and Management*, 155 (1-3), 3-16.
- Pilz, D., Smith, J., Amaranthus, M.P., Alexander, S, Molina, R. & Luoma, D. (1999). Mushrooms and timber: managing commercial harvesting in the Oregon Cascades. *Journal of Forestry*, 97 (3), 4-11.
- Poe, M., McClain, R., Emery, M. & Hurley, P. (2013). Urban forest justice and the rights to wild foods, medicines, and materials in the city. *Human Ecology*, 14 (3), 409-422.
- Pokladnik, R. (2008). *Roots and remedies of ginseng poaching in central Appalachia*. (Doctoral dissertation). Keene, NH: Antioch University New England.
- Pollan, M. (2006). *The omnivore's dilemma: A natural history of four meals*. New York, NY: The Penguin Press.
- Portes, A., Castells, M. & Benton, L.A. (1989). *The informal economy: Studies in advanced and less developed countries*. Baltimore, MD: Johns Hopkins University Press.
- Pouta, E., Sievänen, T. & Neuvonen, M. (2006). Recreational wild berry picking in Finland: Reflection of a rural lifestyle. *Society and Natural Resources*, 19, 285-304.
- Proshansky, H., Fabian, A. & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. *Journal of Environmental Psychology*, 3, 57-83.
- Proulx, A. (1980). The cedar-oil man. *Blair & Ketchum's Country Journal*, 7 (10), 76-79.
- Proust, M. (1924). *Remembrance of things past*. New York, NY: Random House.
- Punch, K.F. (1998). *Introduction to social research: quantitative and qualitative approaches*. Thousand Oaks, CA: Sage.

- Putnam, R. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.
- Rathke, L. (2013). After artisanal cheese, Vermont explores charcuterie. *Brattleboro Reformer*. Retrieved from [www.reformer.com/ci\\_22477938/after-artisanal-cheese-vermont-explores-charcuterie?source=most\\_emailed](http://www.reformer.com/ci_22477938/after-artisanal-cheese-vermont-explores-charcuterie?source=most_emailed)
- Rebek, A. (1982). The selling of Vermont: From agriculture to tourism, 1860-1910. In H. Muller & S. Hand (Eds.), *In a state of nature: Readings in Vermont history* (pp. 273-282). Montpelier, VT: Vermont Historical Society.
- Reckwitz, A. (2002). Toward a theory of social practices: A development in culturalist theorizing. *European Journal of Social Theory*, 5 (2), 243-263.
- Reed-Danahay, D. (2005). *Locating Bourdieu*. Bloomington, IN: Indiana University Press.
- Relph, E. (1976). *Place and placelessness*. London, UK: Pion.
- Ribot, J. (1995). From exclusion to participation: Turning Senegal's forestry policy around? *World Development*, 23 (9), 1587-1599.
- Ribot, J. (1998). Theorizing access: forest profits along Senegal's charcoal commodity chain. *Development and Change*, 29, 307-341.
- Ribot, J. (2001). *Science, use rights and exclusion: A history of forestry in Francophone West Africa*. (Issue paper [Drylands Programme], No. 104). London, UK: International Institute for Environment and Development (IIED).
- Ribot, J. & Peluso, N. (2003). A theory of access. *Rural Sociology*, 68 (2), 153-181.
- Richards, R. & Creasy, M. (1996). Ethnic diversity, resource values, and ecosystem management: Matsutake mushroom harvesting in the Klamath bioregion. *Society and Natural Resources*, 9 (4), 359-374.
- Richards, R. & Saastamoinen, O. (2010). NTFP policy, access to markets and labour issues in Finland: Impacts of regionalization and globalization on the wild berry industry. In S. Laird, R. McLain & R. Wynberg (Eds.), *Wild product governance: Finding policies that work for non-timber forest products* (pp. 287-308). London, UK: Earthscan.
- Riessman, C.K. (1993). *Narrative analysis*. (Qualitative Research Methods Series: 30). Newbury Park, CA: Sage.
- Rigg, J.D. (2006). Forests, marketization, livelihoods and the poor in the Lao PDR. *Land Degradation and Development*, 17, 123-133.
- Rist, L., Shanley, P., Sunderland, T., Sheil, D., Ndoye, O., Liswanti, N. & Tieguhong, J.. (2012). The impacts of selective logging on non-timber forest products of livelihood importance. *Forest Ecology and Management*, 286, 57-69.

- Robbins, C. (1999). Comparative analysis of management regimes and medicinal plant trade monitoring mechanisms for American ginseng and goldenseal. *Conservation Biology*, 14 (5), 1422-1434.
- Robbins, P., Emery, M. & Rice, J. (2008). Gathering in Thoreau's backyard: Non-timber forest product harvesting as practice and tactics. *Area*, 40 (2), 265-277.
- Robertson, F.E. (1915). Economics of the wild fern. *The Vermonter*, 20 (10), 226.
- Robinson, R. (1892). *Vermont: A study of independence*. Cambridge, MA: The Riverside Press.
- Robtoy, H., Brightstar, D., Obomsawin, T. & Moody, J. (1994). The Abenaki and the Northern Forest. In C. Klyza & S. Trombulak (Eds.), *The future of the Northern Forest* (pp. 27-35). Hanover, NH: Middlebury College Press.
- Rolando, V.R. (1992). *200 years of soot and sweat: The history and archeology of Vermont's iron, charcoal, and lime industries*. (Vermont Archaeological Society). Dover, DE: Dover Litho Printing Company.
- Rood, R. (1962). *Land alive: The world of nature at one family's door*. Brattleboro, VT: The Stephen Greene Press.
- Rosendal, G. K. (2006). Balancing access and benefit sharing and legal protection of innovations from bioprospecting. *The Journal of Environment and Development*, 15 (4), 428-447.
- Roszak, T., Gomes, M. & Kanner, A. (Eds.). (1995). *Ecopsychology: Restoring the Earth, healing the mind*. San Francisco, CA: Sierra Club Books.
- Rubin, R.J. & Rubin, I.S. (1995). *Qualitative Interviewing: The Art of Hearing Data*. Thousand Oaks, CA: Sage.
- Rugg, H.G. (1913). Fern protection needed. *American Fern Journal*, 3, 93-94.
- Saastamoinen, O. (1999). Forest policies, access rights and non-wood forest products in northern Europe. *Unasylva* 50 (3), 20-26.
- Salsedo, C. (2007). *Gardening: Cultivating an enduring relationship with nature*. (Doctoral dissertation). Keene, NH: Antioch University New England.
- Satterthwaite, S. (1976). Puckerbursh, cellar holes, rubble: Observations on abandonment in Vermont. In W.C. Lipke & P.N. Grime (Eds.), *Vermont landscape images*. Burlington, VT: Robert Hull Fleming Museum.
- Schlosser, W., Blatner, K. & Chapman, R. (1991). Economic and marketing implications of special forest products harvest in the Coastal Pacific Northwest. *Western Journal of Applied Forestry*, 6 (3), 67-72.

- Schlosser, W. & Blatner, K. (1995). The wild edible mushroom industry of Washington, Oregon and Idaho: A 1992 survey. *Journal of Forestry*, 93 (3), 31-36.
- Schmidt, F. (2003). Population. In J. Duffy, S. B. Hand & R.H. Orth (Eds.), *The Vermont encyclopedia* (pp. 6-7). Hanover, NH: University Press of New England.
- Schmidt, I., Figueiredo, I. & Scariot, A. (2007). Ethnobotany and effects of harvesting on the population ecology of *Syngoanthus nitens ruhland*, a NTFP from Jalapão region, central Brazil. *Economic Botany*, 61 (1), 73-85.
- Severance, M. (2003). The economy. In J. Duffy, S. B. Hand & R.H. Orth (Eds.), *The Vermont encyclopedia* (pp. 26-28). Hanover, NH: University Press of New England.
- Severson, K. (2009, June 10). Neighbor, can you spare a plum? *The New York Times*. Retrieved from [http://www.nytimes.com/2009/06/10/dining/10Fruit.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2009/06/10/dining/10Fruit.html?pagewanted=all&_r=0)
- Shackleton, C. M. (2001). Re-examining local and market-oriented use of wild species for the conservation of biodiversity. *Environmental Conservation*, 28 (3), 270-278.
- Shackleton, C., & Shackleton, S. (2004). The importance of non-timber forest products in rural livelihood security and as safety nets: A review of evidence from South Africa. *South African Journal of Science*, 100 (11&12), 658-664.
- Shackleton, S., Delang, C. & Angelsen, A. (2011). From subsistence to safety nets and cash income: Exploring the diverse values of non-timber forest products for livelihoods and poverty alleviation. In S. Shackleton, C. Shackleton & P. Shanley (Eds.), *Non-timber forest products in the global context* (pp. 55-81). Berlin, Germany: Springer-Verlag.
- Shackleton, S., Shackleton, C. & Shanley, P. (Eds.). (2011). *Non-timber forest products in the global context*. Berlin, Germany: Springer-Verlag.
- Shanin, T. (1990). *Defining peasants: Essays concerning rural societies, expolary economies, and learning from them in the contemporary world*. Cambridge, UK: Blackwell.
- Shanley, P. (1999). To market, to market. *Natural History*, 108 (8), 44-51.
- Shanley, P., Pierce, A., Laird, S. & Guillén, A. (Eds.). (2002). *Tapping the Green Market: Certification and Management of Non-Timber Forest Products*. London, UK: Earthscan.
- Shanley, P., Pierce, A., Laird, S. & Robinson, D. (2008). *Beyond timber: Certification and management of non-timber forest products*. Bogor, Indonesia: CIFOR.
- Shepard, P. (1998). *Coming home to the Pleistocene*. Washington, D.C.: Island Press.
- Sievers, A.F. (1958). *Methods of extracting volatile oils from plant material and the production of such oils in the United States*. (USDA Technical Bulletin No. 16). Washington, DC: US Department of Agriculture.

- Sills, E., Shanley, P., Paumgarten, F., de Beer, J. & Pierce, A. (2011). Evolving perspectives on non-timber forest products. In S. Shackleton, C. Shackleton & P. Shanley (Eds.), *Non-timber forest products in the global context* (pp. 23-54). Berlin, Germany: Springer-Verlag.
- Silverman, D. (2000). Analyzing talk and text. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 821-834). Sage, Thousand Oaks, CA.
- Slayton, T. (2003). Foreward. In J. Duffy, S. B. Hand & R.H. Orth (Eds.), *The Vermont encyclopedia*. Hanover, NH: University Press of New England.
- Smith, J. & Wallerstein, I. (1992). *Creating and transforming households: The constraints of the world-economy*. Cambridge, UK: Cambridge University Press.
- Spradley, J. P. & McCurdy, M.W. (1972). *The cultural experience: Ethnography in complex society*. Chicago, IL: Science Research Associates, Inc.
- Spradley, J.P. (1979). *The ethnographic interview*. New York, NY: Holt, Rinehart and Winston.
- Stanley, E. (2010). *Monkey brains and monkey bars: An ecological approach to the values of school recess*. (Doctoral dissertation). Keene, NH: Antioch University New England.
- State of Maine. (2011). Title 22: Health and welfare, Subtitle 2: health, part 5: foods and drugs, chapter 551: pure foods and drugs generally, subchapter 1: foods, section 2175: Main wild mushroom harvesting certification program. Retrieved from <http://www.mainelegislature.org/legis/statutes/22/title22sec2175.html>
- Stearns, S. (1801). *The American herbal or materia medica*. Walpole, NH: Thomas & Thomas.
- Stedman, R. (2002). Toward a social psychology of place: Predicting behavior from place-based cognitions, attitude and identity. *Environment and Behavior*, 34 (5), 561-581.
- Steel, T. (2010). Food trend predictions for 2011. Retrieved from: <http://www.epicurious.com/articlesguides/blogs/editor/2010/12/food-trend-predictions-for-2011.html>
- Stein, J. (2010). Into the woods: Yes it's positively prehistoric. How foraging has become the latest obsession in haute cuisine. *Time*, 176 (4), 57.
- Strickland, R. (1986). *Vermonters: Oral histories from down country to the Northeast Kingdom*. San Francisco, CA: Chronicle Books.
- Studlar, S. & Peck, J. (2007). Commercial moss harvest in the Appalachian Mountains of West Virginia: Targeted species and incidental take. *The Bryologist*, 110 (4), 752-765.
- Sunderland, T. & Ndoye, O. (Eds.). (2004). *Forest products, livelihoods and conservation: Case studies of non-timber forest product systems*. (Vol. 2 – Africa). Bogor, Indonesia: CIFOR.

- Swan, J. (2009, April 9). Foraging for fun and food. Retrieved from [sports.espn.go.com/outdoors/general/columns/story?columnist=swan\\_james&id=4055119](http://sports.espn.go.com/outdoors/general/columns/story?columnist=swan_james&id=4055119).
- Swiderska, K. (2006). *Banishing the biopirates: A new approach to protecting traditional knowledge*. (Gatekeeper Series no. 129). London, UK: IIED.
- te Velde, D., Rushton, J., Schreckenberg, K., Marshall, E., Edouard, F., Newton, A. & Arancibia, E. (2006). Entrepreneurship in value chains of non-timber forest products. *Forest Policy and Economics*, 8 (7), 725-741.
- Tedder, S. (2008). *Tenure and the management of non-timber forest products in British Columbia*. (Sustainable Forest Management Network). Edmonton, Canada: University of Alberta.
- ten Kate, K. & Laird, S. (1999). *The commercial use of biodiversity: Access to genetic resources and benefit-sharing*. London, UK: Earthscan.
- Thayer, S. (2010). *Nature's garden: A guide to identifying, harvesting, and preparing edible wild plants*. Birchwood, WI: Forager's Harvest Press.
- Thistle, S. (2013, March 15). Bill would prohibit collection of Maine Fiddleheads without permission. *Bangor Daily News*. Retrieved from [bangordailynews.com/2013/03/15/news/state/bill-would-prohibit-collection-of-maine-fiddleheads-without-permission/](http://bangordailynews.com/2013/03/15/news/state/bill-would-prohibit-collection-of-maine-fiddleheads-without-permission/)
- Thompson, E. & Sorenson, E. (2000). *Wetland, woodland, wildland: A guide to the natural communities of Vermont*. Hanover, NH: The Nature Conservancy and The Vermont Department of Fish and Wildlife.
- Thompson, J. 1991. Editor's introduction. In P. Bourdieu, *Language and symbolic power* (pp. 1-32). Cambridge, MA: Harvard University Press.
- Thompson, Z. (1972 [1853]). *Natural history of Vermont*. Rutland, VT: Charles E. Tuttle.
- Thomson, S. (1849). *New guide to health, or botanic family physician*. London, UK: Simpkin, Marshall & Company.
- Ticktin, T. (2004). The ecological implications of harvesting non-timber forest products. *Journal of Applied Ecology*, 41 (1), 11-21.
- Ticktin, T. & Shackleton, C. (2011). Harvesting non-timber forest products sustainably: Opportunities and challenges. In S. Shackleton, C. Shackleton & P. Shanley (Eds.), *Non-timber forest products in the global context* (pp. 149-169). Berlin, Germany: Springer-Verlag.
- Tobin, B. & Swiderska, K. (2001). *Speaking in tongues: Indigenous participation in the development of a sui generis regime to protect traditional knowledge in Peru*. London, UK: IIED.

- Tuan, Y-F. (1977). *Space and place: The perspective of experience*. Minneapolis, MN: University of Minnesota Press.
- Tucker, F. B. (1919). Gathering the spinulose shield fern. *American Forestry*, 25 (307), 1226-1228.
- Tugault-Lafleur, C. & Turner, S. (2009). The price of spice: Ethnic minority livelihoods and cardamom commodity chains in upland northern Vietnam. *Singapore Journal of Tropical Geography*, 30 (3), 388-403.
- Ulrich, R. (1983). Aesthetic and affective response to natural environment. In I. Altman & J. Wohlwill (Eds.), *Human Behavior and Environment: Advances in Theory and Research* (pp. 85-125). (Vol. 6). New York, NY: Plenum Press.
- U.S. Census Bureau. (n.d.) Census of housing. Retrieved from <http://www.census.gov/hhes/www/housing/census/historic/vacation.html>
- U.S. Census Bureau. (2013). State and county quickfacts: Vermont. Retrieved from: <http://quickfacts.census.gov/qfd/states/50000.html>
- U.S. Food and Drug Administration. (2009). Food code 2009. College Park, MD: U.S. Department of Health and Human Services, Food and Drug Administration.
- Van Susteren, D. (Ed.). (1999). *A Vermont century: Photographs and essays from the Green Mountain State*. Rutland, VT: Rutland Herald and Barre-Montpelier Times Argus.
- Vermont Agency of Natural Resources. (2003). *Vermont forest resources plan, 1999-2008*. Waterbury, Vermont: Vermont Agency of Natural Resources.
- Vermont Department of Fish and Wildlife. (2011). *Vertebrate animals of Vermont*. Waterbury, VT: Vermont Natural Heritage Program, Vermont Department of Fish and Wildlife.
- Vermont Maple Sugar Makers' Association. (1894). *Vermont maple sugar and syrup. Its history: How made and how to procure that which is pure and free from adulteration*. St. Alban's VT: Wallace Printing Company.
- Vermont Public Television. (2000). *In days gone by: Vermont country ways*. (Video recording, produced by Caro Thompson). Colchester, VT: Vermont Public Television.
- von Aderkas, P. (1984). Economic history of ostrich fern, *Matteuccia struthiopteris*, the edible fiddlehead. *Economic Botany*, 38 (1), 14-23.
- von Hagen, B., Weigand, J., McLain, R., Fight, R. & Christensen, H. (1996). *Conservation and development of nontimber forest products in the Pacific Northwest: An annotated bibliography*. (Gen. Tech. Rep. PNW-375). Portland, OR: USDA Forest Service
- Wacquant, L. (2005). Habitus. In J. Beckert & M. Zafirovski (Eds.), *International encyclopedia of economic sociology* (pp. 315-319). London, UK: Routledge.



- Wallace, H. (2010, October 18). In the weeds: Foraging for dinner in Oregon. *The New York Times* (style magazine). Retrieved from [tmagazine.blogs.nytimes.com/2010/10/18/in-the-weeds-foraging-for-dinner-in-oregon/](http://tmagazine.blogs.nytimes.com/2010/10/18/in-the-weeds-foraging-for-dinner-in-oregon/)
- Wallerstein, I. (1979). *The capitalist world economy*. Cambridge, UK: Cambridge University Press.
- Webb, J., Schirato, T. & Danaher, G. (2002). *Understanding Bourdieu*. Thousand Oaks, CA: Sage.
- Weinstock, J.S. (1988). Samuel Thomson's botanic system: Alternative medicine in early nineteenth century Vermont. *Vermont History*, 56, 5-21.
- Wheeler, T. (2013, August 9). Maryland bans ginseng picking on public lands. *Baltimore Sun*. Retrieved from <http://touch.baltimoresun.com/#section/-1/article/p2p-76975220/>
- Whitcomb, F. & Whitcomb, P. (1978). Distilling oil from the tree of life. *Yankee Magazine*, 42 (4), 78-83, 121-123.
- Whitcomb, K. (2012, November 5). Amount of posted land increasing in Vermont. *Bennington Banner*. Retrieved from [http://www.benningtonbanner.com/news/ci\\_21929361/amount-posted-land-increasing-vermont](http://www.benningtonbanner.com/news/ci_21929361/amount-posted-land-increasing-vermont)
- Willis, S. & Campbell, H. (2004). The chestnut economy: The praxis of neo-peasantry in rural France. *Sociologia Ruralis*, 44 (3), 317-331.
- Wilsey, D.S. & Nelson, K.C. (2008). Conceptualizing multiple nontimber forest product harvest and harvesting motivations among balsam bough pickers in Northern Minnesota. *Society and Natural Resources*, 21 (9), 812-827.
- Wilson, E.O. (1984). *Biophilia*. Cambridge, MA: Harvard University Press.
- Wilson, E.O. (1992). *The diversity of life*. Cambridge, MA: Harvard University Press.
- Winslow, E.J. (1916). Car loads of ferns. *American Fern Journal*, 6, 19-20.
- Wiseman, F.M. (1995). *The Abenaki people and the bounty of the land: Important wild plant foods of the western Abenaki*. Burlington, VT: Ethan Allen Homestead Trust.
- Wiseman, F.M. (2001). *The voice of the dawn: An autohistory of the Abenaki nation*. Hanover, NH: University Press of New England.
- Wynberg, R. & Laird, S. (2007). Less is often more: Governance of a non-timber forest product, Marula (*Sclerocarya birrea* subsp. *caffra*) in Southern Africa. *International Forestry Review*, 9 (1), 475-490.
- Wynberg, R., Schroeder, D. & Chennells, R. (2009). *Indigenous peoples, consent, and benefit sharing: Lessons from the San-Hoodia*. Berlin, Germany: Springer-Verlag.

- Yeh, E. (2000). Forest claims, conflicts and commodification: The political ecology of Tibetan mushroom-harvesting villages in Yunnan Province, China. *The China Quarterly*, 161, 264-278.
- Zanotti, L. (2009). Economic diversification and sustainable development: The role non-timber forest products play in the monetization of Kayapó livelihoods. *Journal of Ecological Anthropology*, 13 (1), 26-41.

## Appendix A: Interview Guide for Vermont Gatherers

- Tell me a little bit about where you grew up?
- How long have you lived in Vermont?
- How did you get into gathering?
- How did you learn to gather?
- What kinds of wild plants or fungi do you gather?
- What do you do with them? How do you use them?
- If you sell the harvest, who do you sell it to? Do you need to specially prepare products for sale? Where do they go after sale? What kinds of things affect prices paid?
- Describe how you harvest the plants (tools, containers, etc.)? What preparations do you make prior to your gathering trip?
- Do you have any harvest rules you follow (re-seeding, selective harvest, etc.)?
- When do you harvest?
- How do you find the plants and fungi? What kind of woods/field do you find the plant/fungi in?
- Who do you gather with?
- Have there been any changes in your ability to gather? What kinds of changes? Do you know the reasons for such changes?
- Have the amounts harvested over the years changed? How?
- Have you had interactions with land managers/other gatherers where you gather? If so, please explain?

- What are your expectations prior to a gathering trip? What makes for a successful gathering trip?
- Tell me about an eventful gathering trip or two that you've had?
- What do you get out of gathering?
- What is your favorite species to gather? What do you like about it?
- Have you taught your gathering skills to anyone else?
- What do people think about your gathering (friends, family, others)?
- If you couldn't gather in a particular spot, or gather a particular plant anymore, how would you feel?
- Are there other benefits from gathering that we haven't spoken about already?
- Are there any other important things we haven't discussed about your gathering practices/is there anything else you would like to add?

*Demographic questions:*

- Age (give ranges if appropriate)
- What do you do for a living? Full time or part time?
- Highest level of schooling attained?

## Appendix B: Participant release agreement

Thank you for participating in an interview with Alan Pierce on \_\_\_\_\_. By signing this form, you agree to participate in a research study of “Why do people gather wild edible and medicinal plants and fungi, as well as craft materials, in Vermont?”

Participation in this research project is voluntary and you have the following rights:

1. You are free to refuse to answer any questions.
2. You may stop the interview at any time.
3. With your permission, the interview will be audio taped and your signature below grants permission to tape; however, you may ask to stop the taping at any time. You may also ask that any facts revealed in the interview be removed afterwards.

Signing below grants permission to Alan Pierce to use data from this interview/these interviews (including photographs, manuscripts or other materials made during or resulting from this/these interview[s]) to complete a Ph.D. degree, including a dissertation, as well as use of any materials for future publication.

By signing this form, you agree to allow the use of information you provide through attribution to a pseudonym, age, gender, general geographic location, general field of employment and other pertinent information that will help the reader better understand each participant.

I agree to the uses of these materials, as described above, except for any restrictions listed below:

Interviewee:

Signature \_\_\_\_\_

Printed name \_\_\_\_\_ Date \_\_\_\_\_

Address \_\_\_\_\_

Interviewer:

Signature \_\_\_\_\_

Printed name \_\_\_\_\_ Date \_\_\_\_\_

Restrictions:

\_\_\_\_\_  
\_\_\_\_\_

Restrictions in effect until: \_\_\_\_\_