THE "PUBLIC NATURE" OF MOUNT HOOD NATIONAL FOREST

by

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Ways in which "the public" perceives and interacts with "nature" on Mount Hood National Forest are extremely complex and difficult to represent. This study is an exploration of representations of public perceptions and interactions with nature on public lands towards better understandings of these complex relationships. It is also itself a representation of public perceptions and interactions with Mount Hood National Forest. Understandings about representation and "public nature" in this particular place are then used to explore the subject of Conservation Education by the Forest Service there. Participant observation, interviews and cognitive mapping were engaged with Forest Service employees, visitors to the forest and local residents of the Mount Hood National Forest area.

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SECTION ONE – INTRODUCTION

CHAPTER I

INTRODUCTION AND BACKGROUND

Introduction

Ways in which "the public" perceives and interacts with "nature" on public lands are extremely complex and difficult to represent. This thesis explores representations of people's perceptions of, and interactions with, nature on Mount Hood National Forest. It is simultaneously itself a representation of Mount Hood National Forest and people's perceptions and interactions with nature there. Lest all of this quickly become very confusing, most abstractly represented, this thesis could be said to be an exploration of "place," *place* being geographic space that has been conferred with meaning (Presley 2003), as a way to approach the extreme complexity surrounding interactions between people and "nature" on public lands.

"People's perceptions" might be thought to be highly subjective while "nature" might be thought to be highly objective. In what follows, I explore the interdependence of subjectivity and objectivity with relation to so-called "culture" and "nature" toward better understandings of relationships between "the public," public land managers and public lands. Theories relating to subjective dimensions of "nature" and the "public" are engaged and integrated with original research of my own regarding conservation education by the Forest Service on Mount Hood National Forest. Through this case/place study, I hope to bring together theory and practice in a way that might meaningfully inform future management directions on public lands, particularly with relation to conservation education.

Our public lands are more than generic plots of acreage and resources. They are meaningful *places* and many unique relationships with them exist. People sometimes think of public lands in terms of "acreage and resources" although it is likely that anyone who has any direct contact with a specific piece of public land, also conceives of it in other more complex ways. I have chosen to focus on a specific forest that I am familiar with – partly so that I can explore deeper and more complex characteristics and relationships than could likely be otherwise approached in the context of my allotted time frame. Of course, my own

relationship to the forest has changed throughout my experience of doing research there. It is no longer the same place (for me) that it was when I commenced this project and I should not expect conceptions of the forest to remain static for any of my research participants (or readers of this thesis). Conservation education that is engaged in by the Forest Service, a major focus for my research in the field, notably itself seeks to influence conceptualizations of the forest, nature and the Forest Service.

There are always multiple perspectives by which we engage in the world. On our public lands, we both experience them and attempt to "manage" them, with relation to our own use and conceptions of them as places. As part of federal management efforts, the Forest Service often relies on representations of both the public and nature. Representations of the public might be explicit, in the form of visitor use surveys or records of public meetings while representations of nature might be more implicit in cultural assumptions and present management philosophies or paradigms. Whether implicit or explicit, various sorts of representations underlie various management decisions that are made.

Does Mount Hood National Forest as a *place* coincide with representations that we create of it? This is a driving question behind my research and what is presented in these chapters. By the last chapter, problems inherent to the process of representation have hopefully been elucidated and an alternative "way of looking" introduced.

I have engaged in interviews, participant observation and cognitive mapping with Forest Service employees, visitors, and local residents[1] of Mount Hood National Forest. My interest has been in how different people conceive of the Forest and how they conceive of relationships and interactions between the Forest Service and "the public" as well as how these conceptions are represented through the research process. My methods have been primarily qualitative in order to try to explore specific interactions and relationships to the Forest that are likely obscured by simple survey responses and statements of general trends. In trying to better understand wilderness experiences, Glaspell and others have written that "emphasis on generalized site attributes and consistent responses may obscure or simply fail to capture what is uniquely valuable about a particular wilderness place or an individual's

[1] It should be noted that the local residents referred to (i.e. those who participated in my research) do not technically live "on Mount Hood National Forest" in the sense of living on public land, but rather the people who I interviewed as "local residents" generally lived on private inholdings within the National Forest boundary.

experience of it" (2003, p. 62). Other authors have expressed that experiences are "viewed as windows into participants' on-going constructions (emergent stories) of the world and their places in it" (Borrie & Roggenbuck 2001 in Glaspell et al. 2003, p. 62).

Place

A "place" is a geographic setting that has value or meaning (Galliano & Loeffler 1999, Presley 2003). In this sense, it would seem that considerations of place should inherently include both physical and so-called "subjective" dimensions since we establish meaning through personal and cultural lenses. Place is a subject that has recently been given increasing attention in the social science realm of natural resource considerations (e.g. Massey & Jess 1995, Williams 1995, Galliano & Loeffler 1999, Eisenhauer et al. 2000, Williams & Vaske 2002, Cheng et al. 2003, Kruger 2003, Presley 2003). Some of this attention has come from Forest Service affiliated researchers and has appeared in Forest Service Technical reports (e.g. Williams 1995, Galliano & Loeffler 1999, Kruger 2003).

One of the reasons for attention to the subject of place by a land management agency such as the Forest Service is a slow recognition by that agency that humans recognize ecosystems as places (Galliano & Loeffler 1999, p. 1). This has significant implications for land management within the recent paradigm of "Ecosystem Management" since "one of the important challenges of the new paradigm is to connect the biophysical system with the social system of which it is a part" (Williams 1995, p. 3).

The subject of place has something to offer to considerations of both science and management on public lands. Williams notes that ecosystems, as scientifically described, are themselves socially created places since they exist through a particular kind of meaning ("scientific") being ascribed to particular pieces of the landscape (Williams 1995, p. 4) - even if this is not always recognized as a "social" dimension. With regard to land management, Galliano and Loeffler remark that some place research has noted that "many of the obvious deficiencies of past resource management planning endeavors can be directly attributed to a failure to tie human, natural and physical systems to particular places" (1999, p. 7). Eisenhauer et al. (2000) write that "connections with places can be sources of heightened levels of concern about management practices" (p. 421).

Research into the subject of place has been engaged in various fields since at least since the 1970's (e.g. Golledge and Rushton 1976, Tuan 1977), but has gained greater momentum more recently and over the years has shifted focus. Place research in the 1980's, focused on specific attributes of outdoor recreation settings that recreational users were assumed to value. People were believed to seek out particular places explicitly for those attributes (Presley 2003). This approach more recently has come under critique by authors, such as Williams et al. (1992), for its perspective of assuming that recognitions of value are based on ideas about natural settings as *commodities.* This perspective implies that higher values are placed on the *activities* done in a place rather than the settings for those activities themselves (Presley 2003). This perspective seems to have traditionally dominated Forest Service management where decisions have been made to protect "multiple uses" of the land for "the greatest good for the greatest number in the long run" (Clawson 1962, p. 436). This perspective has perhaps promoted conceptualizations of National Forests as generic places where one can go to carry out "multiple uses." While one is likely to refer to visiting Yosemite National Park or Crater Lake National Park, rather than just "*a* national park," it seems more likely for National Forest visits to be referred to in more generic terms.

More recently, some place literature has adopted a more holistic approach to the subject, focusing on how recreation participants relate to places as whole entities rather than breaking places down into isolated attributes. The research of Eisenhauer et al. indicates that "the reasons places are considered special are largely independent of the activities people do there" (2000, p. 438). The concept of "place attachment" from environmental psychology has provided a focus for some of this research, since along with the importance of specific recreational attributes of sites, other personal and cultural meanings are recognized to be important to conceptualizations of place. Through my own research on Mount Hood National Forest, I hope to highlight some of these more subtle meanings of place for various people involved with the forest. Through increasing recognition of Mount Hood National Forest in this broader sense, I hope to point to positive management direction on the forest that recognizes, protects and promotes multiple values rather than solely "multiple uses."

Galliano and Loeffler have referred to "senses of place" as resulting from a combination of elements that include four essential qualities that cultural geographer Ryden

has listed. These qualities are personal memory, community history, physical landscape appearance and emotional attachment (Galliano & Loeffler 1999, p. 2). Many of my responses from research participants regarding their relationships to Mount Hood National Forest exhibit these four qualities (see Chapter 6).

Place as a Focus for Interdisciplinary Inquiry

One of the significant contexts from within which this thesis has been researched and written is the Environmental Studies Program at the University of Oregon. As a field of academic study, environmental studies is relatively new and its definition still elusive (Soule & Press 1998, Maniates & Whissel 2000). One of the reasons for it being difficult to define is the tendency for environmental inquiry to have a strong interdisciplinary nature. This thesis is no exception. I have relied heavily on literature from the better-defined disciplines of anthropology and human geography in particular. Inquiries in landscape architecture, philosophy, english literature, sociology and psychology have also been very informative and my ideas about ecology are very much dependant upon my own natural science-oriented undergraduate background.

One problematic aspect of interdisciplinary studies, that Michael Soule and Daniel Press (1998) address in the context of undergraduate environmental studies curricula, is the danger of sacrificing "depth" of disciplinary inquiry in exchange for "breadth." Their fear is that interdisciplinary approaches that attempt to consider too many different disciplinary perspectives towards environmental issues can result in what they refer to as "multi-disciplinary illiteracy" (Soule & Press 1998). In order to promote "depth" in the environmental studies academic experience, they advocate for splitting environmental studies into three separate approaches including a natural science and policy approach, a humanities approach and a social science approach. They argue that any attempt to mix these distinct approaches runs the danger of promoting "multi-disciplinary illiteracy" because environmental issues are inherently so complex and "environmental studies does not need to become a university in miniature" (Soule & Press 1998).

For my own research, my intention has been for *Mount Hood National Forest* to be the focus of "depth" for my particular environmental inquiry. Perhaps it is unfortunate that

specific places are not often considered to be academic disciplines in themselves. The "breadth" of my work is in some areas "deeper" than others. For example, my chapter on "The Public and Public Lands" was not tied to any formal studies or courses that I took at the university since this more political science side of environmental issues has not been my academic focus. I felt, however, that a discussion of this nature was important to at least initiate despite my difficulty in contextualizing my discussion within a strong disciplinary grounding. Hopefully my "depth" of awareness elsewhere can be forgiven as well. My intention for this thesis is to try to bring together different "ways of looking" in order to initiate deeper and more meaningful exploration and awareness of a particular *place.*

Mount Hood National Forest

Mount Hood National Forest is located in northwestern Oregon. Its boundaries extend both east and west of the Cascade Mountain range as well as north and south along it (see map in Appendix A). It is often thought of as an "urban forest" since it is located in close proximity to the Portland metropolitan region, with a population of nearly two million people (PDC 2004). It has a recreational visitation rate of over four million National Forest visits per year (NVUM 2004). The Bull Run watershed, an area within the forest where public access is restricted, is an important water source for Portland and Mount Hood, Oregon's highest peak at 11,235 feet, is a prime destination for Oregonians, Americans and international visitors. The Forest is one of only two National Forests in the nation to administer a building that has been designated a National Historic Landmark[2] - one that also happens to be a very popular tourist and recreation destination - Timberline Lodge on the slopes of Mount Hood.

The forest is comprised of four different ranger districts, each with their own distinct characteristics. The Zigzag Ranger District is on the western side of the forest and is bisected by the major transportation corridor through the forest (Highway 26). This side of the forest is easily accessible from Portland and the Zigzag District administers the western half of Mount Hood and Timberline Lodge. The Clackamas District is south of the Zigzag

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[2] The other happens to be the previous home of Gifford Pinchot, first director of the Forest Service and influential presence in the early development of National Forest philosophies.

district, also near Portland and well known for kayaking on the Clackamas River, hot springs and a recent contentious timber sale that was aborted (Eagle Creek). The Hood River district administers the north side of the forest and is the closest forest access for the city of Hood River. This district also administers the eastern half of Mount Hood. The Barlow District encompasses the eastern side of the forest and, due to the rain shadow of the Cascades, much of its area tends to be a lot drier than the districts to its west. Subsequently, this district hosts significantly different ecosystems. It also is the least visited of the four districts, although mountain biking and camping are popular there.

Highway 26 is the most widely used traffic corridor through the forest with an average traffic flow of about 8,200 vehicles per day through the western part of the forest from the direction of Portland (Allan et al. 2001). Highway 26 also provides access to the forest from places such as Bend to the southeast with an average traffic flow of about 4,800 vehicles per day (Allan et al. 2001). Highway 35, to the east of Mount Hood, is another significantly used corridor since it provides access from the direction of the city of Hood River and the Columbia river with an average traffic flow of about 1,200 vehicles per day (Allan et al. 2001). Highway 26 and 35 together form part of the "Mount Hood Loop Highway," a popular tourist loop drive for access to the Columbia River Gorge and waterfalls, as well as Mount Hood.

Mount Hood National Forest encompasses a wide variety of ecosystems and wildlife habitat from the temperate rainforests of the western slope of the Cascades to sub-alpine and alpine ecosystems up on the glaciated mountain to drier forests leading to high desert east of the Cascade Range. These diverse ecosystems attract a diversity of recreational uses throughout the year from hiking, camping, fishing, hunting, mountain biking, birding and kayaking to mountaineering, skiing, snow play, snowmobiling and sightseeing (to name just a few). Yet other ecosystem and place-based uses of the area include traditional Native American ceremonies, mushroom gathering, berry picking, bear grass harvesting, and wood harvesting (both commercially and by individuals for firewood and Christmas trees). School groups from the Portland metropolitan area commonly visit the forest to learn about ecosystems, resources and resource management, while recreational groups such as the Mazamas (a Portland-based mountaineering organization) may come out to teach and learn specific outdoor skills such as mountaineering or mountain rescue.

Mount Hood National Forest *Really*

To portray a general sense of an "entity" which serves as the focus of my research (Mount Hood National Forest) for those who may not be familiar with it, I have just described certain select, mostly quantifiable, characteristics of the place. When approaching questions of what Mount Hood National Forest means to people or how those same people conceive of it (or who those people are for that matter), representations are not nearly so easily developed or conveyed. My own presentation of a "general sense" of Mount Hood National Forest is itself not as straightforward as it might seem since the quantifiable characteristics that I have chosen to portray do not transparently represent "what is really there." They have gone through a selection process based on certain personal cultural ideas as well as cultural assumptions that I have of my intended audience (e.g. those interested in issues of public engagement and management of public lands). I assume, for example, that in a two-paragraph introduction to Mount Hood National Forest the proximity of the Forest to the Portland metropolitan area might be a significant detail for my audience. I probably am not expected to highlight its proximity to Dufur, Oregon (a small rural community of fewer than 600 residents on the east side of mountain) although this certainly matters with respect to what the forest "really is" or at least to any attempt to truly understand Mount Hood National Forest more holistically.

We abstract, estimate, assume and represent as a regular part of communication between human beings. Recent literature on the subject of place, however, has emphasized the highly subjective and complex nature of the spaces within which we live and carry out our lives which we are only able to functionally conceive of in terms of "place" (e.g. Massey & Jess 1995, Galliano and Loeffler 1999). In the context of ecosystem management, Galliano and Loeffler write that "an ecosystem is recognized by humans as a place…it is through the mental construct of place that people relate to and understand a geographic area" (1999, p. 1). Does Mount Hood National Forest as a conceptual place coincide with observable representations that we create of it? In order to attempt to better understand this question, I have engaged in my own research project into the subject of place on the forest from a reflexive viewpoint.

Geographers Lawrence Berg and Juliana Mansvelt, in a discussion about the communication of qualitative research findings, note that "writing helps shape the research as much as it reflects it" (2000, p. 171). What I do and do not discuss (and in what light) will influence any sense of Mount Hood National Forest to be perceived by my readers. Since I am also creating a representation of Mount Hood National Forest, the final product of this thesis should not be perceived as removed from the analysis and critique that I am applying to representations that exist already as well as those representations that emerged through my own research. There is another layer of representation in the presentation of my research findings in this medium of text. An important intent of this work is to bring attention to some of the potentially critical details which may be obscured in the process of representation and to explore the importance and implications of an awareness of this obscurity (which is always present in representations) for management of public lands.

A Representation of My Relationship to Mount Hood National Forest

In the following paragraphs I present my own relationship to Mount Hood National Forest in order to help the reader understand both the reference frame from which I write and also to represent the context in which much of my participant observation took place. Here I approach the subject of "the public nature of Mount Hood National Forest" through the lens of self-reflection and self-representation. In subsequent chapters I approach this same subject through a lens of theory and then through the lens of research into the subject of conservation education on the forest.

In June of 2000, I first became involved with Mount Hood National Forest as an environmental/cultural interpreter at Timberline Lodge. As a Student Conservation Association (SCA) volunteer with the Forest Service on the Zigzag Ranger District, I was responsible for leading tours of the lodge, alpine ecology nature walks, and campfire programs as well as answering questions that the public had about the Lodge or Forest or leading occasional requested programs (such as Old Growth Forest hikes). Coming from New York State and having never even heard of Mount Hood or Timberline Lodge, that summer involved an intensive process of learning as much as possible about the place that might have been of interest to Forest visitors. This included local history, local ecology,

recreational options, local orientation (including locations and conditions of trails and roads), and the role of the Forest Service on the land. I wore a Forest Service uniform and found myself to be perceived as an "expert" on these matters before I even had any real sense of where I was.[3]

I discovered myself quite unknowingly falling into a fascinating world where lines between nature and culture blur. Timberline Lodge was crafted almost entirely by hand by artists and craftspeople during the Great Depression as a monument to Mount Hood and its natural environment. The boundary between public and private is also indistinct at Timberline. The lodge is a public building whose construction was funded by the government in order to give people a chance to work and a sense of hope during the Great Depression of the 1930's. It was intended, in the end, to be a recreational site. Despite this strong public intent for the building that persists to this day, the restoration of the lodge in the 1950's was almost entirely dependant upon investment by a single man whose family still runs the concession for skiing, the hotel and the restaurants at the site. The Forest Service continues to administer the building and much of the building is open to the public.

At least the stories that I presented as an interpreter represented the place in this way, blurring the boundaries between public/private and nature/culture. Quite taken with Timberline Lodge and Mount Hood National forest in general, I remained as an almost full-time volunteer with the Forest Service that following winter after my SCA position ended[4]. That winter I also worked part-time for the private concessionaire at Timberline Lodge (RLK Company) serving food at Silcox Hut (a warming hut about a mile up-slope from Timberline Lodge) and leading occasional snowshoe tours. I fell in love with the place, but I also fell in love with telling stories about the place through very positive experiences that I had with visitors to the Forest. Some seemed to gain new appreciation for the Mount Hood area (and the natural world and a certain cultural history in general) through those stories.

The next summer I worked as a Youth Conservation Corps Crew Leader for the Barlow District of the Forest on the drier east side of the mountain and then returned to the large trees of the Zigzag District and Timberline Lodge to finish up my seasonal

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[3] Since the primary "stock" of interpreters on the forest has typically been volunteers, this "disorientation" of those who are supposed to provide orientation to the area is not uncommon.

[4] I was not first in a long line of volunteers who stayed on the forest a lot longer than initially intended, allured by something about the place...

appointment as an "official" interpreter for the Forest Service on and around Mount Hood. When that season ended, I stayed on as a Forest Service volunteer again, also working occasionally for RLK Company.

Noticing that the stories that I and others told about the place really influenced people's experiences there, I was quite surprised that the influence of these stories didn't seem to be adequately discussed or recognized by anyone including the Forest Service in their Interpretive Master Plan for Timberline Lodge. The next summer I left Mount Hood for an interpretive position at Yosemite National Park (where the stories *were* recognized as important) and started graduate school at the University of Oregon that Fall. My interest in pursuing my Master's degree in Environmental Studies was inspired by a desire to explore this subject of people's connections to places through stories.

While at Timberline, I also listened to the stories that others told about the mountain, lodge and forest. These stories seemed to be very much intertwined with various attitudes that people held towards the place, what it meant to them on various levels and how they acted towards it. It was not uncommon to hear love stories, childhood memories, adventure stories and stories of pride that included Timberline Lodge or Mount Hood National Forest as key characters. It was not uncommon to find tears coming to my eyes (or the eyes of others). My return to academia was in pursuit of a better understanding of how the stories we tell each other influence our attitudes towards specific places and "nature" more generally.

Through one of the positions that I held on Mount Hood National Forest I was particularly able to experience first hand some of the significant problems faced by Forest Service employees with regard to conservation education. These were problems that I had not been directly exposed to in my previous positions that had been based out of Timberline Lodge. The summer between my first and second year of graduate school I returned to Mount Hood National Forest to work as an intern for the wildlife biologist where my official title was "Conservation Education Coordinator." In addition to being responsible for trying to organize conservation education materials on the Forest, I was an assistant to biology technician interns who were setting up and monitoring a carnivore camera survey project[5] in

[5] While this thesis questions the adequacy of various forms of representation, such as surveys, for understanding human relationships to Mount Hood National Forest, one might also extend this questioning

remote and high elevation areas of the forest and I assisted with a wetland wildlife monitoring program. Not unlike most other Forest Service employees that I worked with, I had a lot of different responsibilities and rarely enough time to fulfill all of them to the extent that I would have liked. That summer I also helped plan the conservation education component of an autumn festival that the Forest Service and local communities were putting together. On a few occasions, I was able to *volunteer* as an environmental interpreter. It was during that summer that I also completed my interviews with Forest Service employees that focused around conservation education on the Forest.

In selecting a focus for my thesis research, I wanted to explore the subject of people's perceptions of nature and it seemed that this could best be done if grounded in a particular place. It made sense to choose Mount Hood National Forest since for the scope of a two year Master's Degree I couldn't imagine finishing all of my required coursework *and* delving into the world of a new place and issues that I had no previous experience with. I suppose that my work is also partly a criticism of a perspective that one could remotely study and come to understand a place without a deeper investment of self into that place. Regarding the time involved in this project, perhaps my research hasn't taken me any less time to complete as an "insider" since there are a lot of relationships and responsibilities that I must (and want to) attend to in order to perpetuate my engagement in the place. I see this as part of a communicative process that meaningful research aimed at better understanding public involvement with public lands should include. Admittedly I have not been wholly successful in this. Communication (or dialogue) nonetheless, is a recurring theme throughout this work.

The Title of This Work

I have entitled this research project "The Public Nature of Mount Hood National Forest." This title is intended to convey a conception of Mount Hood National Forest that recognizes and embraces an interdependence between "nature" and "culture." The "nature" that I am referring to is not a scientifically described or inventoried "nature" (which also

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to the use of quantitative surveys (and other commonly accepted research techniques) for understanding "other-than-humans." This is a topic for another (perhaps more important) project.

would be inextricably tied to certain cultural views about what nature is), nor a scientifically described or inventoried "public" (which itself would be connected to certain cultural ideas about what that is or might be). Rather, my research approaches the complexity of a place sometimes referred to as Mount Hood National Forest through the nexus of nature and culture (as well as through the nexus of researcher and that which is researched). "Public nature" might be thought of from the perspective of "natural" qualities of Mount Hood National Forest that are shared and valued by "the public" in various ways. "Public nature" might also be thought of from the perspective of the "public" qualities of Mount Hood National Forest that are a source of a great number of difficulties relating to the management of the Forest, as well as the source of great significance for the place. Mount Hood National Forest is a public *place* in the most subjective and objective senses of the word and my research is an attempt to better understand the forest in this way.

I explore ways in which subjectivity influences (and is a part of) conceptualizations of "nature" which influence (and are part of) how people conceptualize a *place* such as Mount Hood National Forest. These conceptualizations in turn influence attitudes and actions towards that place (and towards other places) which is one of the reasons why such considerations should be important to land managers concerned with stewardship of resources and ecosystems. Another reason why such considerations are pertinent has to do with dialogue between land management agencies and the general public since although the recent paradigm of ecosystem management is in large part based in "objective" science, this new paradigm simultaneously recognizes that "an ecosystem is recognized by humans as a place" (Galliano & Loeffler 1999, p. 1).

The Layout

The first two chapters presented in Section One, this chapter included, provide an introduction to my project and the context of Mount Hood National Forest. In Chapter One, I have introduced my project and represented Mount Hood National Forest through a personal lens. My methods for the field research that I did are discussed in Chapter Two. Qualitative methods are also discussed in Chapter Two and considered in relation to

quantitative methods which are more often employed by federal land agencies in trying to understand the "public."

In section two, some of the theory involved with my project is explored. The two chapters in this section each engage various aspects of Mount Hood National Forest through theoretical lenses. Chapter Three briefly explores the concept of the public and public lands in order to begin to look at some of the complexity that is often obscured in the use of these terms. The relevance of "dialogue" is also explored with respect to people in relation to public lands. Chapter Four explores ways in which subjectivity influences (and is a part of) conceptualizations of "nature" which influence (and are part of) how people conceptualize a *place* such as Mount Hood National Forest. Dialogue is also discussed again in this chapter in the context of what a consideration of "subjectivity" might contribute to it.

Section Three shifts to a discussion of the "practice" of engaging the theories discussed in Section One "on the ground." The two chapters in this section address Mount Hood National Forest through a lens of field research. Chapter Five explores Forest Service representations of "the public" and "nature" on Mount Hood National Forest as well as my own. I argue here that richer representations of "public nature" can be achieved through efforts that focus on relationships, including those between the researcher and that which is researched. Chapter Six is a presentation of my research in terms of a specific context (conservation education by the Forest Service). Some of the diversity of experiences on Mount Hood National Forest that I encountered are introduced here and some of the maps that people created are also briefly referred to. In this chapter I begin to address ways in which my research might inform the management of public lands, specifically with regard to conservation education, and the management of Mount Hood National Forest in particular.

Finally, Section Four concludes my project. Chapter Seven is a final discussion of both theory and practice in the context of Mount Hood National Forest with recommendations for future management directions on the land.

CHAPTER II

METHODS

Introduction

My thesis research has sprouted from an assumption that Mount Hood National Forest is a public *place* in the most subjective and objective senses of the word. I have both attempted to better understand the forest as a *place* and simultaneously to ask what is important to efforts to understand a specific place in a meaningful way. Up front it should be noted that representations resulting from my interviews and cognitive mapping are not intended to paint a complete picture of visitors to Mount Hood National Forest. Rather they were engaged as a sort of pilot project toward richer understandings of the "public nature" of Mount Hood National Forest, to elucidate potential ways in which Mount Hood National Forest might be more fruitfully understood.

I have chosen qualitative methods for my project because in them I saw the greatest potential for trying to interpret meanings that emerge for various people within the context of Mount Hood National Forest. Qualitative and quantitative research methodologies might best be used in conjunction with one another to better understand social dimensions of public lands. There are certain qualities of qualitative research, however, that make them particularly suitable to trying to understand the complexity of social dimensions involved with my subject. Some emerging uses of qualitative methods in research, for example, reveal, through the representations that they produce, a critical and reflexive awareness of the research process (as well as the choice of research methods) as influencing the research "results" (e.g. Nagar 1997, Michielsens 2000).

As mentioned, this research is in part an experiment. I attempted to use some various research methods reflexively so that in addition to trying to learn something about people's perceptions of nature on the forest, I was trying to learn something about ways that particular research methods and representations of research findings might both reveal and obscure meaning. For example, Cheng et al. (2003) have written that,

> By classifying places into general categories, the dominant groups in natural resource politics have developed a fairly narrow set of place meanings

> considered in natural resource decision making, whereas the meanings people assign to places can be extremely diverse, nuanced, and multilayered (p. 101).

Qualitative and Quantitative Research Methods

Qualitative and quantitative research methods provide different frameworks for investigating social dimensions of public lands. Oftentimes the two types of research are described in terms of being polar opposites with dualisms emphasized such as between quantitative methods - as adopting natural science perspectives, and qualitative methods - as rejecting natural science perspectives (Winchester 2000, p. 12). Human geographer Hilary Winchester argues, however, that this view can be deceptive because "such a view misleadingly represents quantitative methods as objective and value-free; [and] increasingly this assumption about the nature of science has been questioned"[6] (p. 12). In *Research Methods in Anthropology: Qualitative and Quantitative Methods* (1998), H. Russell Bernard writes that "qualitative description is a kind of measurement, an integral part of the complex whole that comprises scientific research" (p. 24). Bernard conceptualizes the two types of research in relation to one another, instead of in opposition, and he emphasizes the important role of each. In addition to qualitative methods providing initial qualitative descriptions that quantitative research might be designed to test, qualitative research might be used to attempt to understand complex phenomena that numbers alone cannot adequately represent. Bernard writes, for example, that "quantification is inappropriate" for anthropologists working in certain traditions such as the humanistic or phenomenological (1998, p. 24).

As Winchester (2000) asserts, qualitative research is concerned "with elucidating human environments and human experiences" (p. 3). Of course, through the process of my research and my own particular consciousness, I influence the very environments and experiences which I research (and of course there are also influences beyond the scope of this current research project that influence the experiences that I am studying). Dwyer and Limb (2001) write that "qualitative methodologies do not start with the assumption that there is a pre-existing world that can be known, or measured, but instead [qualitative methodologies] see the social world as something that is dynamic and changing, always being constructed through the intersection of cultural, economic, social and political processes" (p.

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[6] This has already been discussed in my chapter on subjectivity.

6). My research related to conservation education aims to gain a greater understanding of particular experiences, other than my own, as dynamic processes in which I do play a role. Qualitative methods were chosen with this in mind.

Participant Observation

From September 2002 to May 2004 I engaged in participant observation on Mount Hood National Forest. This included (1) spending time (some weekends and holidays) in Government Camp and Timberline Lodge, (2) completing a summer internship on the forest as conservation education coordinator/biology technician Assistant (which included helping plan and working at the Mount Hood Autumn Festival), (3) attending a winter potluck for local community members and Forest Service employees who participated in the Mount Hood Autumn Festival and (4) attending "Mount Hood: A View From the Summit" (a large public meeting of sorts at Timberline Lodge).

The notes that I took about these experiences were generally taken after I had a bit of time to reflect on the events. The public meeting at Timberline Lodge was audio-taped, though never transcribed. Throughout my research process I have also drawn on previous experiences on Mount Hood National Forest which were not explicitly planned as participant observation experiences, but nonetheless have provided me with insight toward understanding the forest as a *place*. Much of this experience was gained in the context of working in public service as an environmental interpreter.

Interviews with Forest Service Employees

I conducted 25 semi-structured interviews with Forest Service employees from August to September 2003. All but one of these interviews were audio-taped and transcribed. The interviews were conducted during the time that I was doing a conservation education coordinator internship on Mount Hood National Forest. They were used partially as a project to better understand people's attitudes and ideas about conservation education on Mount Hood National Forest. While they were done mostly on my own time outside of the internship, I used this goal of trying to better understand conservation education on the forest as a way to make the interviews "worth people's (and the agency's) time," so to speak.

This aspect of my research culminated in a presentation that I gave at a Forest Leadership Team Meeting in May of 2004. Many of my questions were focused around conservation education but I also included questions that were more specifically aimed at better understanding people's perceptions of nature on the forest. In soliciting participation in my project, I let people know of both dimensions of my research, trying to better understand conservation education and helping me fulfill my Master's project of trying to better understand people's perceptions of nature on the forest.

These interviews ranged in length from 20 to 90 minutes and mostly were conducted in people's offices (16), meeting rooms in Forest Service Facilities (6) or outdoors (3). Interviewees were chosen by "snowball" or "chain" sampling (Bradshaw & Stratford 2000, p. 44) in which potential participants were identified by being referred to me by Forest Service employees that I interviewed as well as by employees that I was in contact with through my summer internship on the forest. My final selection of research participants involved efforts to represent different levels of Forest Service employment (e.g. district level and forest level, administrative and technical, permanent and temporary) as well as a diversity of programs within the agency. Most of the district level diversity was focused on the Zigzag Ranger District. More than half (14) of my interviews were with employees on the Zigzag Ranger District and among those interviews, ten different resource management programs were represented; including archeology, fire, fisheries, hydrology, interpretation, law enforcement, recreation, silviculture, senior/youth/volunteers, and wildlife biology. Two of the interviews were with seasonal employees while the rest were permanent employees. I interviewed each of the four district rangers on Mount Hood National Forest and was able to formally interview one other employee from two out of three of the districts and to speak informally with one from the third about some of the issues raised in my questions. Six of the interviews were with administrative level employees who work out of Mount Hood National Forest headquarters in Sandy. The forest supervisor and deputy forest supervisor were included in this group.

Interest in the project and willingness to participate varied significantly. About eight of my interviewees seemed to be enthusiastic about my project, very willing to participate, and interested in seeing the results. About three of my interviewees seemed to be strongly disinterested or resistant to the project, but participated nonetheless, due to my persistence

in calling back time after time and/or pressure from other Forest Service employees who were interested in my project and thought that their voices were important to be heard. Most of the interviews ranged somewhere in between these two extremes.

The questions that I asked generally fell into roughly five categories aimed at (1) elucidating involvement with Mount Hood National Forest, (2) ideas about nature, (3) their sense of MHNF as a public place, (4) their ideas about conservation education on the Forest and (5) their own personal experiences there. Appendix C shows a sample of some of the questions asked.

Interviews with Forest Visitors and Local Residents

The semi-structured interviews that I did with forest visitors and local residents were not nearly as intensive as those with Forest Service employees due to time constraints and the logistics involved with approaching "total strangers" and convincing them to participate in more "in depth" (yet lengthy) interviews. Nor was I able to engage with a diverse cross-section of the public. I conducted about 14 informal interviews in the winter of 2003-2004 with forest visitors (10) and local residents (4) in conjunction with cognitive mapping exercises that I did with them (described further on). The mapmaking exercises were also part of the interview process since a lot of ideas that emerged during the interview part of interactions with participants were developed upon through the cognitive mapping. These interviews were recorded through notes that I took directly on my question guides during the interviews as well as notes that I wrote immediately after each interaction with participants.

Participants were solicited at Timberline Lodge, two snow parks, at Trillium Lake and in Government Camp. The visitors that I interviewed were all at Timberline Lodge, White River and Snow Bunny Snow Parks and Trillium Lake, while the local residents that I interviewed all lived in Government Camp. Appendix A is a map that shows these locations in relation to the Forest. They are mostly located within the Highway 26 corridor.

Potential forest visitor participants were selected from people who were standing or sitting around at Timberline Lodge, the two snow parks and Trillium Lake. I sought visitors who did not look terribly busy so that they might be willing to take about 15-20 minutes to

do an interview and cognitive mapping. Some of the interviews and cognitive mapping took longer than that, since some people talked in more depth about their experiences and/or seemed to have more interest in the project. I tried to keep the time commitment for participants to a minimum in order to increase the pool of likely participants, but I also wanted to have a degree of depth in the interactions. There were many people who I did not approach because they seemed to be too busy and others who I approached but were not willing to participate.

In order to make the small number of people that I interviewed as diverse as possible, I explicitly sought both men and women, multi-ethnic visitors, and also people who appeared to be interacting with the area in a diversity of ways. As discussed somewhat in my chapter on representation (Chapter 5), it was often more difficult to get women to participate than men, although this varied some between specific locations. Multi-ethnic visitors were also often difficult to engage, especially since some of those who I approached did not seem to speak English very well and in any case were reluctant to participate. The only "multi-ethnic" representative that I was able to successfully interview (a man from Romania who now lives in Portland) spoke very good English. Since I only approached people who were not already actively engaged in activities, this did make it difficult to talk to people who might have better represented a wider diversity of users. For example, I did not stop skiers or snowshoers who were very focused on what they were doing. I also did not approach people in more remote areas, with the exception of the two interviews that I did on the shore of Trillium Lake, which in winter is about a two mile ski in from the road and snow park.

Questions asked were meant to respond to questions that were raised during my interviews with Forest Service employees as well as to better elucidate participants' perceptions of nature and Mount Hood National Forest as a place. Examples of some of my interview questions can be found in Appendix D.

Cognitive Mapping

Cognitive mapping is sometimes used as a way to approach questions of environmental perception. Kevin Lynch (1960) used cognitive mapping in order to study

people's perceptions of the urban environment with implications for urban planning. Other authors extol its virtues (e.g. Gould & White 1974, Downs & Stea 1977, and Aberley 1993) with an assumption that "'mental maps' [which cognitive maps are meant to represent] play a critically important role in human life and culture" (Aberley 1993). Perhaps the greatest significance of cognitive mapping to this thesis involves some of the drawbacks that I faced in my particular approach to it which is discussed in greater detail in Chapter Five.

Cognitive mapping involves engaging research participants directly in the creation of spatial representations of their perceptions of place. For my own research this was done with the fourteen winter visitors and local residents that I also interviewed. For the most part, individuals completed maps that I gave them, but in two cases, the maps were worked on jointly. Each participant was given a map that was created using GIS software which represented a roughly outlined Mount Hood National Forest with some major landmarks, roads and population centers labeled (see appendix B).

Visitors were asked to indicate or mark areas on this map that they thought of in terms of the following ten categories. Some supplemental questions were then typically asked for certain categories (and are noted in parentheses):

1. Places you like to go on the forest (how do you decide?)
2. Areas that are most important to your idea of Mount Hood National Forest
3. Places you know a lot about
4. Places you would like to learn more about
5. Areas that you consider to be wilderness
6. Best areas for recreation
7. Best areas for resource extraction
8. Good places to learn about nature (how do you learn about nature?)
9. Places that you think are important to take very good care of
10. What needs to be added to this map in order to make it best represent how YOU think about the forest?[7]

Each category had a different color of pencil associated with it which visitors used to mark on the maps. Notes were taken throughout the process of participants drawing on the maps. These

[7] This category is different than the other nine. In the color associated with this category, participants were asked to draw anything else on the map that they felt needed to be added to make the map best represent their experiences there, (rather than exclusively indicating prescribed areas on the map).

notes related to supplemental questions that I asked to clarify what was being drawn (and why) as much as they related to my observations of the process of participants drawing on the maps.

Discussion

The significant disparity in numbers and depth between the interviews that I did with Forest Service employees versus visitors and residents should be emphasized. Within the structure of the Forest Service as an agency, and due to my prior association with many of the employees there, I was able to conveniently schedule and meet with a significant number of employees (25) for more in-depth interviews (some more than others relating to interest level held by individuals). This was much more difficult to do with forest visitors with whom I had no prior association, were primarily engaged in recreation, who may have been on very limited time schedules and who represented a wide variety of "publics." My experiences with visitors and local residents through my research are also supplemented to a certain degree by personal experiences working on the forest in public service for significant amounts of time (although not continuously) between 2000 and 2002.

The fact that all of my interviews with forest visitors and local residents were done in the winter should also be noted. While some visitors may associate themselves with the forest in both summer and winter, there are significantly different uses at these different times. Again, my interviews and cognitive mapping are not intended to paint a complete picture of visitors to Mount Hood National Forest. Rather they were engaged as a sort of pilot project toward richer understandings of the "public nature" of Mount Hood National Forest, to elucidate ways in which Mount Hood National Forest might be more fruitfully understood.

SECTION TWO – THEORY

CHAPTER III

THE PUBLIC AND PUBLIC LANDS

They built a high wall there
And tried to stop me
On the sign it said
"Private Property"
On the other side
It didn't say nothin'
That side was made for you and me.
-Woody Guthrie
(*This Land is Your Land*)

Introduction

Mount Hood National Forest is part of a National Forest system that comprises about one quarter of all federally administered public lands in the United States (other federal lands are managed by other federal agencies including the Bureau of Land Management, the U.S. Fish and Wildlife Service and the National Park Service) (Platt 1996). Unique to the U.S. Forest Service is that it is situated within the Department of Agriculture whereas the other three major land management agencies are situated within the Department of the Interior. The "public" lands of the United States are managed according to differing priorities depending on which agency they fall under, but common to all is the notion of a "public" to which the lands essentially "belong." Questions of who or what "the public" is as well as what it means for land to be "public" land are often overlooked, simplified or poorly defined legally amidst the ongoing work that the Forest Service does as an employer of about 45,000 people nationwide (USFS 2002) to "sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations" (USFS 2004, Mission Statement).

In this chapter I will address issues surrounding ideas of "the public" and "public lands" as well as ways in which the Forest Service attempts (with varying degrees of success) to understand and/or communicate with "the public." I will also begin to discuss the significance of dialogue between the Forest Service and "the public," focusing on the

context of MHNF. This chapter is intended to be a brief introduction to these topics that will serve as both background and support to the rest of my work. It is here where I also begin to engage various aspects of Mount Hood National Forest through a lens of theory.

The Public of National Forests

The category of "public" is quite familiar yet social scientists and political theorists often use the term in contradictory ways (Sheller & Urry 2003, p. 108) (not to mention use of the term by the "general public" and Forest Service). Sometimes the public is conceptualized in terms of a distinction between *public interest* and private interest, focusing on a boundary between capitalist economic markets and the state or collective interests. The public might also be thought of in terms of the *public sphere*, a place where "open and rational" debate can occur or a "social space that lies between the state, on the one hand, and the private sphere of family life and economic relations, on the other" (Sheller & Urry 2003, p. 110). Sheller and Urry (2003) note that yet other conceptualizations of "the public" involve a focus on *public life* (as opposed to "private life" which takes place within the "domestic realm"), *public space* (as areas outside of the home or workplace where people can congregate, socialize and/or recreate in a relatively unregulated manner), or *publicity* (an exposure of something in the public domain). Some conceptualizations of "public" exist as contrasted with "private" which in turn is often conflated with capitalist economic interests. Other conceptualizations involve more of an idea of space where interactions of various sorts can occur amidst a variety of people and environments.

In addition to the term "public" having multiple and sometimes conflicting meanings, Sheller and Urry argue that in the 21st century, distinctions between public and private domains cannot survive (p. 113) since technologies such as automobiles, television and the internet have blurred any potential boundaries. Results of recent visitor use surveys that were done on National Forests throughout the country reported that 22.5% of National Forest visitors are "driving for pleasure" (presumably within their "private" automobiles) (Forest 2003).

Meanwhile, many theorists point out that there is not singular public, but rather a multitude of them (e.g. Asen 2003, Dewey 1927/1954, Cohen and Arato 1992, Fraser 1992).

"The public" has become increasingly recognized as diverse and management of recreation areas is slowly acknowledging this. There has been a significant amount of literature emerging recently that addresses this subject (e.g. Tierney et al. 2001, Tarrant and Cordell 2002, Thapa et al. 2002). My own experiences on Mount Hood National Forest elucidated this notion of multiple publics when working as an environmental interpreter at Timberline Lodge I noticed significant numbers of multi-ethnic forest visitors who did not conceive of (or interact with) the Timberline Lodge area in primary ways that were anticipated by the area's Interpretive Master Plan, e.g. conceiving of the lodge as "...a unique and inspiring symbol of the Northwest..." (MHNF 1983, p. 2).

National Forests as Public Lands

In light of this more complicated notion of the "public" or "publics," one might attempt to consider what "public lands" are. "Public lands," as far as the Forest Service is concerned, have their origin in the "forest reserves" that began to be withdrawn from the public domain in 1891 (Platt 1996, p. 378). At that time, much of the land that had been considered public domain (between 1781 and 1867 - about 1,837 million acres) had already been given as grants to non-federal entities such as homesteaders, railroads or states. In 1975 the public domain, including Mount Hood National Forest, was about 693 million acres, less than half of what it had been in the early 1800's (p. 373).

Rutherford Platt (1996) traces this trend of "disposal" to "retention" of public lands and points to such voices as those of George Perkins Marsh, John Muir and Major John Wesley Powell (who each addressed issues of "profligate squandering of the nation's natural resources" (p. 375)) as having eroded "the political viability of disposal" in favor of retaining significant parts of the remaining public domain as public land (p. 378). He draws a parallel between public perceptions of human-environment relations (influenced by natural resource-oriented writers, geographers and scientists such as Marsh, Muir and Powell) and policies which led to the establishment of public lands in forms such as national parks (e.g. Yellowstone in 1872), forest reserves (1891) and national wildlife refuges (1903). "As perception of the impact of human actions on natural resources changed, so too, eventually, did the laws and policies governing such actions" (Platt 1996, p. 378). Although a rift

between "conservationists" (such as Gifford Pinchot, first director of the Forest Service) and "preservationists" (such as Muir, who is often associated with the development of the National Park system) developed, there was still a certain degree of consensus about the value of maintaining public lands in the public domain.

Cultural attitudes have also been discussed in relation to the history of public lands. Michael Williams (1989) traces cultural attitudes towards forests through the years in his book *Americans and Their Forests.* Williams discusses Judeo-Christian experience, European tradition, and pioneer myths (as well as other "cultural factors") as also among influences to public sentiments, toward forests in particular, held at various times throughout American History - that subsequently influenced policies towards forested lands and the current states of those public lands. Others have undertaken similar projects (e.g. Nash 1971/1967, Cronon 1983) and are mentioned here to emphasize the connection between public perceptions and the fate of "the natural world" and to highlight the fact that these connections have been given serious attention in academic literature. The public and public lands are not so easily separable from one another.

Out of this rift between the "conservationists" and "preservationists," differing philosophies developed within the Forest Service as compared with the Park Service. These differing philosophies (as well as the rift between the conservationists and preservationists itself) were likewise supported by the development of divergent public perceptions (another illustration of the idea of multiple publics). While philosophies of Park Service management were and have been more aligned with Muir's "preservationist" ideas, philosophies of Forest Service management have developed more along the lines of "multiple-use."

Similar to the way that public attitudes toward retaining parts of the public domain changed during the 19th century, during the 20th century the ways that people have interacted with those public lands have also changed dramatically. Visits to public lands (including National Forests, National Parks and National Wildlife Refuges) more than doubled between 1956 and 1964 alone (Clawson 1967, p. 1) as "post war influence and access created a rising public interest in federal public lands for their recreational and other non-commodity values" (Yaffee 1994, p. xviii). The advent of automobiles in the early part of the century made the public more mobile and developments in mass media spread awareness of the public lands and promoted their potential as recreation destinations. Although beginning in

the 1940's an increasing amount of lumber began to be cut on National Forests, general interest in non-timber, non-game forest resources and values increased significantly in the 1970's (Yaffee 1994). Today, recreation is an important part of public lands and the means by which most people have contact with them.

Sometimes public lands are referred to interchangeably as "federal lands." While it can be seen that "public sentiment" and advocacy through the years has significantly influenced the very existence of the fairly extensive "federal" (or "public") land system in existence in the United States today, one might frame a discussion in terms that imply that such land "belongs" to the federal government or "the state" rather than to the people or "the public." In common parlance, National Forests are often referred to as "Forest Service land" which reflects a conflation (from the "the public's" perspective) of "public service" on "public lands" with ownership of that land by the entity which is supposed to provide certain "services" there.

There has recently been a renewed interest in the philosophy of John Dewey (a strong presence in the fields of political theory, philosophy, and education during much of his career in the early 20th century), in part for its potential insight to problems of democracy and "the public" (Caspary 2000, p. 1). With regard to my present discussion, Dewey defined a distinction between state and public by referring to the state as a *public* that has organized to protect its interests (Asen 2003, p. 179). "The state is the organization of the public effected through officials for the protection of the interests shared by its members" (Dewey 1927/1954, p. 33). Dewey also insisted that the concept of "the state" (or "the public" for that matter) is too vague to be meaningful. He urged that to best understand "the state" or "the public," one should not look to abstract theorizings that seek to develop timeless, place-less conceptions, but instead one must attend to discursive practices *in context.* One way that Dewey proposed to do this was through critical historical investigation.

If, however, one is trying to understand something about the public or public lands in terms of present or emerging qualities, qualitative research is one way to approach this (see Chapter 2). My own research that is reported in this work is itself an endeavor to "attend to discursive practices in context," such as Dewey proposes, in exploring representations of public perceptions and interactions with nature on public lands through the use of qualitative methods towards better understandings of these complex relationships.

The present mission statement of the USDA Forest Service is "to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations." A current slogan of the same agency is "Caring for Land, Serving People" (USFS 2004). How is it that the Forest Service determines what "the needs of present and future generations" are or for that matter, who the people it is serving are? Attempts to include "public participation" in planning processes, visitor-use surveys (regarding recreation on National Forests) and place assessments (as a part of ecosystem management) are a few ways. The latter two are particularly relevant to my present research involving forest visitors.

Assessment of the Public and Public Perceptions

As already discussed, what we refer to as "the public" is not a unified nor a consistent entity and therefore will not ever be completely understood. In order to *better* understand "the public" in the management of National Forest lands (particularly in the face of much recent public resistance to management strategies…e.g. protests and litigation against timber sales in the Pacific Northwest), the Forest Service sometimes attempts to include the public in planning processes, and conducts visitor-use surveys or "place assessments." Some of this is required by policy (such as NEPA, NFMA, Executive Order 12862 – Setting Customer Service Standards, and some National Forest Plans) and some of this is simply recognized as helpful to a successful planning process (e.g. implementation of the National Recreation Agenda) (NVUMP 2002). Visitor-use surveys (quantitative approaches) and place assessments (generally more qualitative approaches) are two "public involvement" vehicles that will be addressed in what follows for their relevance to my own efforts to understand "the public nature of Mount Hood National Forest."

The National Visitor Use Monitoring Project (NVUMP) involves a recreation sampling system (NVUM) that is meant to "be cost effective and provide statistical recreation use information for the Forest Service at the forest, national and regional level" and has been implemented since 1998 (NVUMP 2002). The visitor-use surveys that are done through this program provide statistical information about "the public" that visits

national forests including age, sex, ethnicity, most popular recreation activities and average lengths of visits (among other things) (NVUMP 2002).

Such visitor use surveys do provide a certain abstraction of "the public" that may be representative to a certain degree, and can be relatively easy to implement (given that they are a tried and tested form of research), but my own experiences and research on Mount Hood National Forest have led me to question the adequacy of such representations (see Chapter 5). Just as representations seem to reveal certain things, they always are obscuring others.

For example, I was present at Timberline Lodge on one day that these surveys were being administered and noticed that the survey-giver located herself (perhaps unintentionally) in places where she would encounter "traditional" users of the area (e.g. in front of the historic lodge and down in the parking lot below the day-use lodge). From my previous experiences at the location, I had noticed that there were quite regularly significant numbers of multi-ethnic users of the area out to the east of the lodge up in the snow. It is very likely that none of these "non-traditional" users (i.e. those perhaps not conceiving of Timberline Lodge itself as the center of interest) participated in these surveys and therefore, they were not represented in the visitor-use survey. It was reassuring to find that the Forest Service itself is questioning the validity of the surveys due to some questionable aspects of the surveys administered at Timberline Lodge that they did not go into greater detail with me about. I was recently informed by a Forest Service contact for these surveys that the forest was planning to conduct their own survey in a few years. The surveys in question were administered through a contract with a group not affiliated with the Forest Service.

Place assessments are a more recent alternative development in terms of attempts to understand the public by the Forest Service. Though perhaps not yet widely used, they have become a recognized endeavor by the Forest Service in the past decade. Place assessments are now required by the Forest Service Scenery Management System, for example (USDA 1996). The research methods associated with place assessments are often qualitative rather than quantitative and they are sometimes recommended as a way of making connections between biophysical and social elements that need to be considered as a part of ecosystem management (e.g. Galliano & Loeffler 1999, Williams 1995). "A sense of place serves as a

significant factor for reflecting the human dimensions of ecosystems and also functions as a link between social experiences and geographic areas" (Galliano & Loeffler 1999).

My own research initially started as a "place assessment" (of sorts) of Mount Hood National Forest. Through the research process, however, I was exposed to other issues surrounding and underlying such work and I decided to turn my project into a medium for discussing some of these issues in the process of representing some socio-ecological aspects of Mount Hood National Forest. Nevertheless, "place" has remained an important focus and theme in my work. Admittedly, the project of a place assessment of a large complex landscape and user population such as Mount Hood National Forest likely exceeds the realistic scope of a single student's Master's thesis.

Dialogue and Public Lands

In *The Public and Its Problems* (1927/1954) Dewey writes that "there is too much public, a public too diffused and scattered and too intricate in composition (p. 137). He writes of an "eclipse" of the public, referring to a problematic state resulting from American democratic practices that emerged in local communities, but which have more recently expanded on a vast scale which has reconfigured societal relations on overwhelming, impersonal bases. Additionally, technological advances have increased social complexity to a degree that citizens can no longer discern the indirect consequences of human actions nor confidently judge issues affecting them (Asen 2003). Robert Asen (2003) argues, however, that Dewey is not pointing to this particular complexity and to the already discussed notion of a multiplicity of publics in order to dwell on it as *itself* a problem. Rather, Dewey was describing *present problems* that he experienced "the public" to be facing in the early 20th century. Dewey also pointed to potential solutions to these problems. Asen writes that Dewey "did not object to multiplicity, but to *uncoordinated* multiplicity" (Asen 2003, p. 176, emphasis added).

Dewey identified *the* problem of the public as communication or dialogue. "The essential need, in other words, is the improvement of the methods and conditions of debate, discussion and persuasion" (Dewey 1927/1954, p. 208). Research attempts by the Forest Service to better understand the public might be seen in light of their communicative role.

One way that the Forest Service (often by way of contracted researchers) approaches the public is through the implementation of visitor use surveys and place assessments to which the public responds and then those responses are recorded as representations. Representations of the public and/or public perceptions that result from such research are then reacted to (to whatever degree) by the Forest Service and filed away for potential future reference. While the whole process would ideally be dynamic in that it should be ongoing and responsive, this dialogue is often hindered by problems in our public decision-making processes, such as discussed at length by Steven Yaffee in his book, *The Wisdom of the Spotted Owl: Policy Lessons for a New Century* (1994). A movement by the Forest Service towards greater public involvement, might be seen in attempts to improve dialogue between the Forest Service (as the land manager of some particular public lands) and the public.

It is important to emphasize that Dewey's ideas of public and private were as categories that were fluid, constructed in social interaction and subject to historical transformation[8]. When discussing communication or dialogue, it is important not to gloss over the dynamic and interactive nature of all "sides" that are involved with that dialogue. Some literature in Linguistic Anthropology, particularly literature addressing the subjects of subjectivity and performance, engages this idea (e.g. Benveniste 1971, Hymes 1974, Bauman 1984). This is discussed in greater detail in Chapter Four. Shifting emphasis to "attending to discursive practices in context," as advocated by Dewey and discussed previously, may lead to better design of research such as through the engagement of qualitative methods (this is further discussed in Chapter 2). This could potentially lead to better representations of the public that could play more meaningful roles in a better process of dialogue on public lands. Of course, such research resulting in representations, will never be "enough." True dialogue requires ongoing interaction and reciprocity and this is something that my present research on Mount Hood National Forest has also pointed to.

Dewey thought that the public could emerge from its less than ideal situation if the present fragmented society could be remade into a "Great Community" (Asen 2003, p. 181). To Dewey, a community represented a "moral, meaningful human achievement that arose

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[8] This standpoint differs significantly from Habermas, another social theorist who seems to have held a view in which public and private were held more as essential categories that could exist one without the other, beyond "conversation" between them (Asen 2003, p. 176).

and persisted through *communication*" (Asen 2003, p. 181, emphasis added). Communication or dialogue may be thought to be critical because it provides a means for events to be made meaningful and valuable. Meaning is precisely what literature on the subject of place often points to as defining the very essence of *place* (e.g. Massey & Jess 1995, Williams 1995, Galliano & Loeffler 1999, Eisenhauer et al. 2000, Williams & Vaske 2002, Cheng et al. 2003, Kruger 2003, Presley 2003). Dewey emphasized that "an order of energies transmuted into one of meanings" allowed for something which could be "appreciated and mutually referred by each to every other on the part of those engaged in the combined action" (Dewey 1927/1954, p. 153). Dewey also wrote of communication that it is a *creative* endeavor that is engaged in as both a means and an end (Dewey 1926). While much of what Dewey advocates for may be extremely complex on a national scale, perhaps it is more feasible on the scale of a National Forest such as Mount Hood.

Through experiences and current investigations on the forest, in particular through my interviews with local residents and MHNF employees, a common theme that emerged was one of a sense of a lack of communication or dialogue in several key relationships. These include relationships between the Forest Service and the local community, between forest and district levels of Forest Service management, between administrative and "on the ground" employees, among various Forest Service disciplines and between the Forest Service and particular recreational users of the Forest (some of whom are trying to actively promote stewardship of Mount Hood National Forest).

Conclusion

The public is an extremely complex "entity" (if it can even be called that) and this complexity is intertwined in the very notion of public lands. The Forest Service has increasingly tried to include public participation in planning processes, and has conducted visitor-use surveys and place assessments in order to better understand and serve "the public." While assessments of the public and public perceptions by the Forest Service (through such means as visitor-use surveys and place assessments) provide the agency with representations of an abstracted public that may be referred to in decision-making processes, these representations are static and not necessarily very communicative (or fairly

representative). Communication or dialogue may be framed in terms of being key to the notion of "the public" and democracy in general.

While Forest Service employees on MHNF do seem to recognize value in dialogue with the public towards better management of public lands, it may not be as successful as one could hope. Perhaps, the public and public lands need to be considered more "ecologically" (see Chapter 7), that is, in terms of interactions and interdependencies (such as between the public and public lands, between multiple publics, between the public and Forest Service…and between the researcher and that which is researched) rather than in terms of a finite entity that could be understood in isolation from its context. My own research was carried out with this in mind.

CHAPTER IV

NATURE AND SUBJECTIVITY

Most of the issues that we deal with on the forest have no basis in fact. They're emotional and we also are appealing to people on an emotional scale...
– A Mount Hood National Forest district ranger
(while attempting to define conservation education)

Introduction

Mount Hood National Forest is many different things to many different people, as well as to many different species whose habitat falls within the political boundaries of the forest. As an example, for some people, the forest might be conceived of primarily in terms of people whereas for others it might be conceived of more fundamentally in terms of other life forms. Each of these conceptions involve ideas about "nature" and just as there is not one homogenous "public," there is not one homogenous, indisputable "nature" on the forest. Those who study "nature," those who "manage" it, and also those who seek "nature" for utilitarian, recreational or spiritual purposes have different conceptions of what nature is. These conceptions, along with various cultural perspectives that individuals might share with others, likely relate to those individuals' particular motivations towards nature. Individual (and social) experiences are also likely to play a role as people form their ideas about what nature is. It is pretty unlikely that an individual even really knows how she conceives of nature in a *general* sense since various conceptualizations of it appear to depend on specific contexts and situations.

Subjectivity influences (and is a part of) conceptualizations of "nature" which influence (and are part of) how people conceptualize a *place* such as Mount Hood National Forest. These conceptualizations in turn influence attitudes and actions towards that place (and towards other places), which is one of the reasons why such considerations should be important to land managers concerned with stewardship of resources and ecosystems. Another reason why such considerations are pertinent has to do with communication between land management agencies and the general public, since although the recent

paradigm of ecosystem management is in large part based in "objective" science, this new paradigm simultaneously recognizes that "an ecosystem is recognized by humans as a place" (Galliano & Loeffler 1999, p. 1). In order for dialogue about ecosystems to occur, people must be talking about the same subject (and recognize that there might be significant diversity in the ways that diverse people conceptualize that subject). The subject of "communication" or dialogue will again be discussed in this chapter in the context of what a consideration of "subjectivity" might contribute to it.

What is Nature?

Defining nature is a complicated project that certainly depends a lot on the context in and for which nature is being defined. In my interviews with forest visitors, I asked participants to define "nature" to the best of their ability in order to see how they would respond. Many people did not know where to begin and those who did initiate a response, often changed it as they went along, sometimes weaving a narrative that carried themes that had emerged throughout their interview. For example, one woman (who I approached as she was sitting in the snow at Trillium Lake with another woman and a younger girl) began by defining nature as "alive and outside" and proceeded to define it as that which is "pristine or untouched." This was a woman who had grown up on Mount Hood in Government Camp (and had since moved to Portland) who talked often, in our interview, about not wanting Mount Hood National Forest to change. Her ideas about nature seemed to be interwoven within a larger narrative that she told about her relationship to Mount Hood National Forest.

Descriptions of nature might also take the form of a scientific narrative. Scientific descriptions of certain quantifiable aspects of Mount Hood National Forest might be taken by some to be descriptive of nature. Among Forest Service "'ologists" (the various scientists that are employed by the agency to research, monitor and manage the forest's resources and ecosystems) there might be certain commonly held understandings about nature on the Forest that might fundamentally differ from some commonly held understandings of many recreational users. Then again, there might very well be recreational users that share similar

scientific narratives. Indeed this is often a narrative that is perpetuated through conservation education programs on the forest as well as through public education.

When nature is described through a scientific narrative, it might simultaneously be understood from different perspectives that might vary culturally and according to individual experience. In looking to ways in which different cultures describe nature, anthropologist and human ecologist Roy Ellen notes that very few languages even have words which translate as "nature." He discusses, however, how some focal notion of cognitive dimensions of nature is always present (in terms of nature as "kinds of 'things,'" "space which is not human" and "nature as inner essence") (Ellen 1996, p. 120). In Ellen's project to attempt to "map out" the underlying "geometry" of nature (within particular conceptions of it), he emphasizes the importance of looking to "functional associations" *between* cognitive dimensions in order to "greatly extend and enhance the symbolic imagery of nature" (p. 116). In other words, he seems to be implying that the nuanced "life" of conceptualizations of nature is in the interactions and movement between different, (somewhat) "explainable," aspects of nature. For example, Ellen explains the concept of "the wild" as arising through the conflation of the cognitive dimensions of nature as "space which is not human" and nature as "inner essence." Ellen's efforts are self-purportedly efforts "to resist the imposition of our own nature-culture dualisms on data" and he applies these ideas to his own study of the Nuaulu people of Seram in eastern Indonesia (p. 120). He attempts to "go beyond linguistic representation and to situate perception within actions on the world" (p. 120).

Nature as Object?

The nature that Forest Service scientists study is an objectified nature of observable and measurable quantities. These very scientists probably also conceive of nature in different ways that are not so easily quantified. Many of the Forest Service scientists that I interviewed[9] not surprisingly indicated choosing their career path in the sciences (as well as their career path with the Forest Service) for a desire to simply "be outdoors." When asked

[9] I interviewed about 10 Forest Service employees who I considered to be "scientists." Not all of these "scientists" were presently working in the strict science disciplines of the agency, but all had been trained as scientists.

about their most memorable experiences on Mount Hood National Forest, it was also more common than not for responses to involve more non-quantifiable aspects of the Forest. After explaining one of his most memorable experiences on the forest as hiking for hours doing a stream survey to turn a bend and see "the most spectacular waterfall that you could see," a fisheries biologist on the Forest went on to say:

> ...there's something about running water, or even the ocean. And I think that part of what you asked me before, you know, what do salmon do, they BRING you to the rivers, to the lakes, the streams and they put you in contact with water. And there's a soothing effect that water has on people. I don't know what it is. Neurochemical or what [laughs] psychological or what? But it's part of that whole experience.

Conservation biologist Michael Soule writes that perceptions of nature "accumulate, layer on layer, such that the most scientific conceptions exist side by side with the most pagan, even within the mind of a single person" (Soule 1995, p. 139-140). He proceeds to illustrate nine distinctive "cognitive formations" of nature that might be recognized, including nature as "unpredictable and evil bully," nature as "open-air gymnasium," nature as "Gaia" and nature as "biodiversity" (p. 139-140).

Nature and Identity

As well as nature (or people's conceptions of it) being a complex notion that is probably at least as difficult to justly represent as it is to begin to understand, nature might be thought of in terms of different ways in which people establish their own identities. Greider and Garkovich (1994) write that elements of nature, as thought of by specific groups of people, carry "multiple symbolic meanings that emanate from the values by which [those] people define themselves" (p. 1). Through the interviews and cognitive mapping exercises that I did with forest visitors and local residents, people represented particular aspects of their identities to me in relation to the context of the research scenario.

A Romanian-American man that I approached at Snow Bunny Snow Park, where he was standing around with friends and family watching their children ride inner tubes down a slope, developed a narrative through our interaction that portrayed his own identity as

changing with relation to nature. Initiated in the context of him misunderstanding (and me mis-communicating) a question that I intended to be about what role he thought that conservation education and volunteering should play on the forest - he began to talk about how his concept of Mount Hood National Forest changed through the nine years that he has lived in Portland. While demonstrating a shift in attitude towards the Forest Service within this context, he was also representing an evolving personal identity in relation to nature and the forest.

When he first arrived in Portland and started coming out to the forest, he told me, he couldn't believe all of the rules that the Forest Service imposed on the people there. He gave examples that included parking permits, campground etiquette, and dwelling on fire safety. After about three years of resenting this, he said that he came to really appreciate how these rules help protect and keep the place beautiful and a wonderful "natural" place to spend time. He wishes that it were like that in Romania.

Now this Romanian-American man represents himself as being perceived by his friends as "uptight" because he is really adamant about taking care of the forest, particularly with regard to fire safety.[10] He referred to how he now sees a connection between a poor quality of natural environment that he perceived in Romania and particular attitudes that people generally held there. He remarked that in Romania people do not care about conservation and that you can see it in poor air quality and litter. He represented Mount Hood National Forest as a much more "pristine" environment and he felt personally responsible for getting his friends in Portland (mostly Romanian[11]) to recognize this. Throughout our dialogue, it became apparent that the meaning of Mount Hood National Forest had changed for him over the past nine years as well as had his own identity in relation to it.

Nature/Culture Dualism

While nature might be conceived of *objectively*, as something "out in the world" (and observable commonly by all) that we might begin to come to understand better through

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[10] When asked if he had ever volunteered on the forest he indicated that he hadn't, he did say that he would be very interested in getting involved with volunteer firefighting on the forest, if that were possible.

[11] This man represented the Romanian population of Portland as being about 7,000-8,000 people.

quantifying science, there are many other conceptualizations of nature that are certainly more *subjective*, indeed even constitutive of our own identities (and less easy to understand through quantifying science). The very notion that nature is an object, apart and separate from who we are as human beings, is sometimes discussed in terms of it being a significant part of a specifically Euro-American cultural identity. This aspect of Euro-American identity is deemed by some to lie at the root of many environmental problems today (e.g. Merchant 1995, Lichatowich 1999, McEvoy 1986). It is sometimes referred to in terms of a nature/culture dualism. In the anthology *Nature and Society: Anthropological Perspectives*, various anthropologists explore ways in which such dualisms might be effectively overcome in explorations of so-called "nature" and "culture" (Descola & Palsson 1996). Descola and Palsson write that "going beyond dualism opens up an entirely different intellectual landscape, one in which states and substances are replaced by *processes and relations*" (Descola & Palsson 1996, p. 12, emphasis added).

Some Problems with a "Subjectively" Defined Nature

Some argue that delving too far into more "subjective" explorations of nature is dangerous because it can be used to avoid human responsibility for environmental degradation. Taken to the extreme, it is sometimes argued that there really is no "objective" world out there to steward. It is all a matter of how we think about it. Conservation biologist Michael Soule has responded to this in an essay entitled "The Social Siege of Nature" within an anthology devoted to this subject that he edited along with Gary Lease (Soule & Lease 1995). In the next section of this chapter, I will refer to this response to deconstructionist views on the subjective construction of "nature" by Soule. I will argue that a recognition of the role of subjectivity in perspectives toward nature does not mean that what might be considered an "objective" natural world is denied existence in and for itself. In fact, I hope to problematize the subject/object dichotomy and point to potential for "other ways of looking."

Nature through Meaning

An objectified nature is also an essentialized nature, a nature that is assumed to exist in the same way for everyone despite cultural or individual orientation. Anthropologists have long tackled questions regarding essentialisms in their studies of other cultures as well as our own. Are there certain ways that all human beings essentially think, categorize the world, conceptualize themselves as subjects in relation to one another and to the world,...etc. (which might be some good support for ideas that there is only *one* nature "out there"), or are there fundamental differences between cultures? Strangely enough, perhaps because "the facts can be artifacts of the theory" (Rolston 1988) anthropologists have found both to be the case.

Soule (1995), in defense of a nature that is really "out there" apart from our thinking about it (in his noble efforts to protect that nature), emphasizes findings such as in Brown (1984) that folk taxonomies (as well as scientific classification systems) are cross-culturally similar enough that we can conclude that they "are built to a large extent on discontinuities occurring in the world of plants and animals" (Brown 1984, p. 9). Similar studies have also been done on cross-cultural perception and categorization of color (e.g. Berlin & Kay 1969) indicating that "semantic universals do exist in the domain of color vocabulary" (p. 1).

Others, however, have argued that such studies obscure the fact that cross-cultural classification systems may appear to be similar from a standpoint of perceptions of physical objects, but really they can be quite different because they *mean* different things to the people involved. Conklin (1964) writes that "color, in a western technical sense, is not a universal concept and in many languages such as Hanunoo [which he studies] there is no unitary terminological equivalent" (p. 189). Sahlins (1976) writes that "it is not [...] that color terms have their meanings imposed by the constraints of human and physical nature; rather, they take on such constraints insofar as they are meaningful" (p. 141). In Feld's (1982) studies of the Kaluli people of Papua New Guinea he refers to his own endeavor to understand Kaluli "folk" taxonomy and Kaluli culture (after failed efforts) in saying that "instead of trying to separate zoology and myth as distinct and neatly bounded modes of observation and deduction, I needed to see just how Kaluli packaged them together in a mutually supportive way, based on certain fundamental premises about the world" (p. 45) Not being unique

amongst research findings involving other cultures (more recently), Feld found Kaluli people to classify the natural world in ways that made the most sense to their lives as they interact with it. For example, one of his Kaluli informants lost patience with him while he was initially trying to "specify the zoological content" of some closely related species and said "Listen--to you they are birds, to me they are voices in the forest" (p. 45). One may ask in light of such studies, what "is" *Western* nature...and what implications for nature and culture do our conceptualizations involve.

What many anthropologists suggest through the findings of their studies with other cultures is that it is indeed subjectivity (perspectives arising through individual/cultural situatedness) that gives rise to cultural notions of "objectivity," or what *is* in the world. The Sapir-Whorf hypothesis is a classically cited idea in anthropology asserting a notion of cultural relativity with relation to language. In other words, this hypothesis asserts that different languages provide different categorization systems and thereby the speakers of different languages live within different realities. The work of Sapir (e.g. 1964) and Whorf (e.g. 1956) seems to have been key to the theoretical development of linguistic anthropology, but they have been criticized by some for leaning too far to the "side" of subjectivity (isn't there some sort of world that we all have in common?) in perhaps a similar way that Soule (1995) criticizes social deconstructionists as waging an "Ideological War on Nature" (p. 146).

However, one *need not* choose between a position of thinking of nature as not really existing (decontextualized subjectivity) or of nature as only existing in one specific and rigid way (decontextualized objectivity). One can shift one's focus towards the *contextualization* itself. Hornborg (1996) argues that "ecological relations are based on meaning" and that "there is really no reason to emphasise the material over the communicative aspect of ecosystems or, for that matter, to do the reverse with respect to human societies" (p. 53). He goes on to write that "Once we recognise that human subjectivity [e.g. situatedness], along with the subjectivity of all the other species, is an aspect of the very *constitution* of ecosystems, we have a solid foundation for the conclusion that the destruction of meaning and the destruction of ecosystems are two aspects of the same process." In this sense, subjectivity does not need to be thought of in terms of being a chaotic and divisive aspect of our existence in the world. Rather, perhaps subjectivity is a window into the context of the environments and the worlds that we all share. Such a shifting of perspective towards

context is just what certain environmental ethicists have tried to accomplish. Arne Naess engages this idea of contextualization (involving both space and time) in his book *Ecology, Community and Lifestyle* (1989). Carolyn Merchant also gives a lot of attention to historical contextualization in the development of her "earthcare" ethic (1996). Even Holmes Rolston III, who argues for an objective basis for environmental ethics, does admit the importance of context in the second half of his book (1988).

What is Subjectivity?

The subject of subjectivity is central to the work of linguistic anthropologists. Linguistic anthropologists approach subjectivity through studies of how speakers establish the subjectivity of both selves and others through use of language (and thinking patterns). They also approach the subject of subjectivity through studies of dialogue, in which focus is often shifted to the dialogic nature of language where subject/object statuses are always dynamically interchanging and interdependent (e.g. Benveniste 1971, Hymes 1974, Tannen 1993). This relates back to my previous discussion of nature as conceived both subjectively *and* objectively and through interactions between different conceptualizations rather than through static, isolated conceptions themselves. The idea of dialogue also provides a connection to a discussion of communication in explorations of relationships involved in the subject of "the public" and "public lands."

Subjectivity is often associated with a strong sense of the specific related to an individual's unique existence in and perception of the world. Some of the words and phrases that appear amidst subjectivity's sizeable dictionary entry are *experience, reality as perceived, phenomenal, personal, particular* and *individual* (Webster's 1981) What might be thought of as necessary as a complement to this conceptualization of the subjective is an *objective* world that really exists "out there" that individuals have differential access to (which one could attribute to their previous experiences, personal dispositions, cultural dispositions, genetic makeup, etc.) because there is indeed something that binds our experiences in the world together into some sort of cohesion (e.g. Naess 1989, p. 47-8).

It is no wonder that there is great appeal to focus on the so-called objective side of things in our efforts to understand our social/ecological existence in the world (whether we

are talking about the nature of reality or ethics that we believe should stem from what we believe to be the nature of reality). This conceptualization of an "objective" world is a conceptualization of a world that we *share*, interpersonally and cross-culturally. It is probably for this reason that some environmental ethicists such as Holmes Rolston III (1988) try to convince us of objective values in nature, values that are independent of our subjective evaluations, by referring to what science has shown to "*really* exist" as nature which one should recognize to be valuable in and of itself.

One need only look at nearly any aspect of the current state of society to see how very powerful (both positively and negatively) a shift in focus to the "objective" can be[12]. Positively, large groups of particular people live longer and physically healthier lives, and culturally, some noble efforts have been made to protect the other-than-human world based on "objective" scientific accounts indicating its apparent "need" for protection from healthier, longer-living and powerful humans (a strange paradox). Negatively, in addition to a human-induced ecological crisis (that science unveils for us), we find ourselves in a social crisis of sorts, exemplified by the fact that we don't have adequate ways to objectify (and thereby recognize) social costs and benefits in our economic systems.

Collective Subjectivity

Much credence is currently given to the value of "objectivity" in the world of management of natural resources by law and by federal agencies such as the Forest Service. Yet, even amidst subjectivity (which any linguistic act, including thinking/reasoning, involves[13]), there is often some sort of consensus about the content of this "subjectivity," since there can be communication between individuals. For example, we *share* languages. Within languages, certain understandings and values may be shared. Science itself is a language of sorts and is not "value free" as it is often made out to be (Merchant 1996, Trudgill 2001). Perhaps the particular "feelings" involved in cultural constructs matter very much. Geographer Stephen Trudgill writes that "feelings…underpin ecology" and that this

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[12] For example, Carolyn Merchant (1996) writes of the "ideology of objectivity" which has guided the work of many Western thinkers (p. 60).

[13] According to the influential linguist Benveniste (1971), subjectivity arises only through language and language is indeed the basis of subjectivity (p.224, 225).

"is good for democracy because attitudes inherent in [particular cultural constructs such as] the conservation ethic also relate to feelings which can be widely shared" (p. 677).

To bring this back to my discussion of nature on Mount Hood National Forest, a common (though not universal) emphasis by Forest Service employees regarding conservation education was the importance of "objective" content in messages that the Forest Service shares (or should share) with the public about "nature" on the Forest. Yet, I wondered what was meant by "objective" and pressed interviewees further on that subject. In nearly every case, if asked to further elaborate, it seemed that original representations of "complete objectivity" didn't really match their underlying conceptions drawn from their lived experiences "on the ground." An example of this can be seen in an interview that I did with a Forest Service program manager. This particular Forest Service employee professed a strong desire to make conservation education work on the forest. He said the following when discussing how he thinks that conservation education should be done:

> Rather than taking the strong tack of 'cattle grazing is bad' if you get the cattle in the stream or 'timber harvesting is bad' if you cut down to the stream's edge or if you harvest too much of the watershed. That used to occupy a lot of our education curriculum. That type of value-laden teaching. But now it's been more getting people, and mostly children, but also adults too, to understand for themselves how this system works, how it functions, what the relationships are for biotic and abiotic factors and how relationships work for the biotic component within communities within landscapes or watersheds, and then pose questions to them or allow a structure whereby they collect data and make observations and draw conclusions and then let them draw their own conclusions....which is very similar to how scientists are taught to think or their learned behavior coming from universities.

In this passage, the program manager is referring to a certain objectified nature and is emphasizing that the Forest Service should teach the public about nature on the forest by providing them with a structure within which to simply discover that (objectified) nature for themselves. It is presumed that personal values should not be involved in this "discovery" process. As our interview continued, he further qualified what he meant:

> I've found first hand, from having gone out and worked with children and primarily middle and high school students, that when you have a program

> oriented towards just teaching to them, they tend to absorb a small fraction of that and then they glaze over. And they become distracted or they quickly get in tune with this sort of rote memorization aspect of learning, rather than the opposite, whereby you engage them in it first hand and they're required to work through it, problem solve, think critically, form their own hypotheses, if you will, and test them, and then draw conclusions. And the power in that I've seen has transcended for me my whole view on conservation education, and you know, if you want to insert any bias into it, you know, direct if you will, kind of the orientation of your educational program delivery, you don't need to. You truly don't need to.

To this I replied that I didn't think that values were really extracted from the type of conservation education that he was talking about and he forcefully interrupted me before I completed my sentence in order to agree. Our discussion continued in the following way:

> Adrianna: …because kids are out there with people who are passionate about what they are doing and they see that firsthand and maybe that experience is what sort of allows them to observe and create their own values rather than have someone preach to them.
>
> Program Manager: Yeah, it's incredibly powerful! It's an order of magnitude more powerful than just the teaching to them...[pause]....the aspect on the telling of stories, I don't think that that has to be dropped. I think that that can still be woven in to conservation education programs in a way that you deliver it such that you don't have a predetermined outcome. In other words, you're not forcing the listener in this case to kind of draw a single conclusion.
>
> Adrianna: Yeah, there are very different types of stories that can be told.
>
> Program Manager: You can tell different stories in contrasting ways that WILL allow the listeners to walk away with different conclusions based on their observations and experience.

As our dialogue unfolded, it became apparent that subtle nuances surrounding the program manager's ideas about good conservation education mattered a lot. He had initially described his idea of good conservation education in terms of simply exposing people to a value-free, objectified nature. As he elaborated on this subject through our dialogue it became clear that values did play an important role in his ideas about conservation education through the strong *involvement* of people and stories rather than the passive transfer of

"information" to audiences. He implied that this involvement should include both so-called objective and subjective aspects. We further discussed how it seems to matter a lot *how* stories about nature are told in the context of conservation education and he offered the following:

> In my experience the best storytellers have been Native Americans because they're very powerful about the telling of the story in terms of the process and the function and how things work, and how things are interconnected without having to say 'if you bring your cattle in the creek and trample salmon redds, it's a very bad thing. It's a very powerful tool.

Dialogue, Subjectivity and Nature

Another subject to address in trying to answer the question of what nature *is*, what subjectivity has to do with it, and how this influences how people conceive of a place such as Mount Hood National Forest, is dialogue. Addressing subjectivity within the context of dialogue is one way that Linguistic Anthropologists attempt to re-contextualize language so as to better understand how meanings emerge for people within their particular language/thought systems. Hymes (1974) discusses ways in which the identity of "others" can be constituted through dialogue. He shows how cultural values and world view can influence dialogue so that in a case of the Ojibwa people that he cites, other-than-human beings are considered as persons through the act of the people (of a particular world view) speaking to them directly (i.e. addressing them as "*you*s") (pp. 13-14). Hymes writes that the ethnographic approach (involving a focus on dialogue) "requires us to extend the concept of communication to the boundaries granted it by participants of a culture" and "it also makes it necessary to restrict it to those boundaries" (pp. 14-15). Does the Forest Service include "the public" within its boundaries of communication?

This also raises some interesting questions regarding human-environment relations within (and as influenced by) Western cultures which do not seem to allow such extensions of person-hood but instead draw boundaries between nature and culture. This situation is encountered in the field of linguistic anthropology itself. "Language" is often defined as communication in which only humans participate, leaving little room for people to concern themselves with communication amidst other species and between humans and the other-

than-human world (including an awareness of human effects on natural environments). One might also question to what degree our dominant Western ideologies allow for intercultural or interdisciplinary communication. Various languages (and specialized terminologies) we use develop within specific cultures or disciplines. Where do we draw the boundaries around our particular cultures or disciplines in order to include or exclude participation? Again, what about communication between the Forest Service and the public?

Hymes (1974) also writes, with regard to the Sapir-Whorf hypothesis (linguistic relativity) mentioned above, that "lingistic relativity is secondary, and dependent upon a primary sociolinguistic relativity" (p. 18). That is, we should not assume that because one speaks a particular language that he or she makes meanings (about the world that (s)he conceives herself to live in) in ways that could be deciphered from a study of the language alone (decontextualized). Tannen (1993) writes that "specific linguistic strategies have widely divergent potential meanings" (p. 165). Studies of contextualized subjectivity in different cultures may give us insight as to different ways that people cross-culturally conceive of the other-than-human world. The insights of Tannen and Hymes may give us hope that there might indeed be different ways for Westerners to realize meaning within *our* language/thought systems that might not be so ecologically (biologically and culturally) taxing (so long as we recognize the significance of contextualization). There does now seem to be a shift towards new ways for understanding meaning within various Western thought/language systems, including that of the Forest Service (e.g. increased emphasis on public participation in management).

These explorations of Linguistic Anthropology are also meaningful because while a focus on "dialogue" may be important for better understanding conceptualizations of Mount Hood National Forest, a focus on dialogue is also critical in a more direct sense for a public land agency hoping to engage its public. Such explorations also have significance because subjectivity influences (and is a part of) conceptualizations of nature, which influence (and are a part of) how people conceive of Mount Hood National Forest as a meaningful place.

Nature, Culture and Context

So far in this chapter I have tried to demonstrate the role of subjectivity in defining what nature *is* as well as how conceptualizations of what something "is" influence what it *means* to us. I have done this not to participate in a "social siege of nature" (Soule 1995) but in order to draw attention to an emerging discourse in which "nature" and "culture" are conceived of as being active agents in dialogue together. I write from a context in which acknowledgement of "subjectivity" has often been subordinated to acknowledgement of "objectivity" – in the management of public lands. But, one cannot exist without the other. *Both* nature and culture are important to considerations of both nature and culture.

It seems that what is critical to a conceptualization of nature and culture in dialogue (as is emerging now in various disciplines) is a shift in attention from the categorical *split* between nature and culture to the *relationship* or dialogue between nature and culture, e.g. changing the *meaning* of a nature/culture dichotomy. Context matters immensely in dialogue. All sides of a dialogue need a time and place, that is a specific situation, in which to come together or be considered together. The natural world might be thought to be our ultimate "context," an all-encompassing context, which we experience only in particular and specific ways. This might be our ultimate present ecological dilemma…the context of nature still is a part of all that we do (even just in that we eat and drink), but as Westerners, we are very often experientially removed from this context. We buy food "products" in stores where we do not experience the "nature" that the "products" are products of, including the dirt/water/air/sun context that they emerged from as well as the cultural "dirty work" involved with the planting/harvesting/transporting context). In a consideration of and dialogue about specific public lands, such as Mount Hood National Forest, we are fortunate in that we do indeed (at least) have a context.

Subjectivity and Communication

Throughout this chapter, three themes have repeatedly emerged in relation to subjectivity. These themes are meaning, dialogue and context. In considering nature and/or Mount Hood National Forest, as soon as one slips into the mode of representation, there is great allure to resort to explanations that are as "objective" as possible since one likely hopes

that others will understand what one is talking about. There is a common assumption that that which is "objective" is shared by all. My discussion of subjectivity has been intended to elucidate ways in which subjectivity is also shared and important to consider. Sometimes subjectivity is even shared in more robust ways (than objectivity) since there is always a fair amount of consciousness that needs to be involved in the process of understanding the subjectivity of others. It cannot merely be measured and recorded. Among ways in which subjectivity is shared are included meaning, dialogue and context. Communication is a process that involves each. Communication also seems to be essential to the very act of attempting to understand shared subjectivity. This is why the chosen methods for my research were qualitative. I hoped to deal with subjects in more contextually sensitive and communicative ways than purely quantitative methods could allow.

Conclusion

Nature is an extremely complex concept that is inextricable from culture. Ways we think and talk about nature influence how we act towards nature and simultaneously play roles in our emerging identities. Conceptualizations involving ideas about nature, as well as ideas about our own identities, significantly influence how we conceive of a *place* such as Mount Hood National Forest. Context and language are critical for our conceptualizations to emerge and this is where a notion of the forest as a *place* becomes critical. A place is where meanings can emerge and through dialogue be shared. Through the process of dialogue, various conceptualizations of nature can be negotiated and better understood. This is pertinent to relationships between the Forest Service and the public as well as to my own research. My research has involved intense efforts toward engagement in dialogue between myself and many relevant parties.

SECTION THREE – PRACTICE

CHAPTER V

REPRESENTATION IN RESEARCH

A representation is a sign or narrative account intended to influence, persuade, or be interpreted by a viewer or hearer.
- Carolyn Merchant (1996, p. 63)

Introduction

The subject of communication or dialogue has repeatedly re-emerged in the context of this thesis. Dialogue may be framed in terms of being key to the notion of "the public" and democracy in general (Chapter 3). Since "nature" may be seen to be inextricable from "culture" (Chapter 4), communication within and between cultures should also be seen as critical to decisions about interacting with nature (e.g. public land management). It could be argued that both "publics" and "nature" are not easily communicated with since neither is univocal and there is also a chance that neither speaks the same language as land managers. Representations of "the public" (or "publics") and "nature" are thus relied upon as part of a quasi-dialogue through which public land managers make decisions about public lands.

Through my experiences working on Mount Hood National Forest over a period of about 2 years, I began to question the aptness and adequacy of surveys to represent the public when I noticed substantial multi-ethnic populations near Timberline Lodge on Mount Hood who did not fit usual Forest Service assumptions and representations of "the public" that spends time at that site (i.e. a whole bunch of white people). Upon interacting with some of these visitors, I recognized that many did not conceive of Timberline Lodge in the same way that, for example, the Forest Service's Interpretive Master Plan did. In its own words, the Plan states that "Timberline Lodge means different things to different people, but to *all* it is a unique and inspiring architectural symbol of the Northwest" (USDA Forest Service 1983, emphasis added). Many of the multi-ethnic visitors to the lodge who I talked to (playing out in the snow and taking pictures) didn't even really seem to *see* the lodge although it was only a few meters away. My interest in this issue of representation of the public increased when I was present at Timberline Lodge while a visitor use survey was

being administered under contract by the Forest Service (NVUM 2004). The survey-giver stood at the entrance to the historic lodge and down in the parking lot where primarily skiers and snowboarders park before entering the day-use lodge. This day-use lodge is where rental services, lift ticket sales, gift shops and food concessions are located. It is quite possible that those who never entered the historic lodge nor participated in commoditized forms of recreation epitomized by the day-use lodge would never have been in contact with this survey-giver.[14]

Partly in response to what I perceived to be inadequate representation of "public nature" on Public Lands, I initiated this research project hoping to better represent some public perceptions of nature on Mount Hood National Forest. These efforts are meant to complement *and* critique efforts by the Forest Service to attempt to understand "the public" through the use of traditional surveys alone. Surveys can be useful as static representations from particular perspectives from which some aspects of public interaction with (and perceptions of) the forest are made apparent while others are obscured or all together hidden. It is important that this latter characteristic be recognized. It is also important to note that I was not successful, in the scope of my project, of reaching the diversity of "publics" that I had hoped to. This has been discussed in greater detail in Chapter Two.

Interestingly, the research process itself wound up becoming as much the focus of my research as that which I initially set out to attempt to better represent. Although I initially conceived of my research in terms of setting out to better represent "public nature" on Mount Hood National Forest, it became apparent that what I was seeking to represent was something that was continually *emerging* rather than simply existing for me to "reveal" or represent. Conceptualized in this different way, it also became apparent that as a researcher, I was also a part of what I was studying, and that the process of understanding something is also significantly communicative.

Through an acknowledgement of the dialogic nature of the engagement of forest visitors, land managers and local residents in research and through the use of reflexivity in

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[14] I was only up at Timberline for one of the days that the surveys were being administered and I am not familiar with the entire protocol involved with the process. In a conversation with a Forest Service employee on the Zigzag ranger district who was one of the two forest contacts regarding the surveys, I was told that, the forest was planning to do its own survey about 2 years from now (2006) since there was some concern about the "reliability" of the Timberline data in particular.

the creation of representations of "public nature," I argue that more meaningful representations of the public and "public nature" can emerge. This chapter draws attention to some of the complications that I encountered in the implementation of my own research agenda and urges for a rethinking of representation in terms of ecology. I draw parallels between ideas of ecology (in which nature is described in terms of the interaction of its constitutive parts rather than in terms of the isolated parts themselves) and the cognitive and communicative processes of representation. In what follows I focus primarily on cognitive mapping as a research technique and touch upon gender and performance issues that are revealed through reflection on my research process.

Cognitive Mapping as a Focus for Discussion

My use of cognitive mapping was intended to be a way that I could let visitors to Mount Hood National Forest more actively participate in representing their experiences and perceptions of nature on the forest. Through implementation of my research, I encountered challenges that may be as important to reveal as any other aspect of my research (see Chapter 2 for a further discussion of Cognitive Mapping as a research method).

In order to facilitate the analysis and comparison of maps created by forest visitors and local residents, I decided to use basic map templates of Mount Hood National Forest that were created using GIS software. Part of this decision was based on my desire to relate to the Forest Service as an audience in a "language" that it is familiar with. I accepted the loss of the possibility for each participant to create his or her own unique individual map in favor of a format that would require minimal time commitment from participants as well as allow for easier compilation of results into a representational form that could be easily understood and related to other GIS layers. In reality, this choice meant that participants were not able to represent their *own* cognitive maps. Rather, they were interacting with a ready-made map (of certain cognitive underpinning) upon which certain features were represented (e.g. Mount Hood, major rivers, major roads, major population centers and major recreation sites) and other features were not (this base map is included in Appendix B). It cannot be assumed that all visitors and residents fundamentally conceive of the forest in this way nor that anyone conceives of the forest exclusively in this way. The same could

be said about the categories that I had participants mark on the maps using ten different colored pencils, such as "areas that you think of as wilderness," "good places to learn about nature" or "places that you know a lot about."

Discourse and Ecology

Perhaps it is not unrelated to the ecological nature of the world itself that richer representations of that world might be achieved through choosing to reveal interactions and processes rather than only isolated and reduced researched parts. According to Alf Hornborg, cultures are contingent upon communication just as ecological relations are (1996). One might also consider the ecological character of the human mind (Lakoff 1987, p. 113). Even one's own thoughts and perceptions don't exist in isolation from one another but rather through interdependent connection and communication. In considering discourse (specifically with reference to the use of pronouns), Benveniste (1971) writes that "...the reality to which I or you refers [...] is solely a 'reality of discourse'" (p. 219).

When dealing with human conceptualizations of nature, Roy Ellen (referred to in Chapter 4) has discussed ways in which he believes that richer ideas about nature can best be represented through the use of categorizations of "dimensions of nature" (Ellen 1996). This is best done not when the categories are taken as discrete explanatory categories themselves, but rather when interactions and complications between the categories are considered. Ellen lays out three cognitive axes for construing nature *inductively* as kinds of things, *spatially* as a realm outside of our living space and in terms of an inner *essence*. Ellen writes that "each of the three axes [...] outlined is insufficient in itself to generate or define any one cultural construction of nature: all three are necessary to even begin to map out its underlying geometry" and that we culturally experience nature through "boundary problems and inner contradictions which arise once we juxtapose two or more of the axes " (Ellen 1996, p. 112). Though my cognitive mapping research on Mount Hood National Forest may only begin to hint at the complicated notion of the public perceptions of nature on the forest, it seems that the representations that I create of those perceptions can be richest if I am able to reveal interactions, complications and communication involved in the process of the research itself.

Research as Discourse

Participants had different ways of interacting with the blank maps that I provided them. For example, the intended spatial dimension of the maps was sometimes ignored or misunderstood. Since certain major landmarks were labeled, when I asked participants to indicate, for example, "places that you would like to learn more about," some participants circled names of places such as "Salmon River" instead of indicating the line that was intended to represent the river itself. Some participants seemed to have less of a sense of the geographic representation intended by the map than a sense of familiarity with the names of places that they had been to, such as Ramona Falls or Badger Lake. In the limited number of mapping exercises that I did with visitors and local residents (14), many participants named places that were not pre-labeled on the map and were at a loss as to where they would be located on the map beyond general vicinity. Some people were quite confident in marking the maps as to where named places would be located, yet upon referencing an official forest map afterwards, names and spatial location did not always correspond well. One man, in considering the category of wilderness (as conceived by him), carefully shaded areas on the map that were a certain distance from rivers, apparently mistaking the rivers for roads (as he revealed through comments that he made while drawing).

Through my field notes I was able to capture some of these more complicated dimensions of the process of mapmaking that were concealed in the physical representations that participants produced. Some of these complications might be avoided through better map design and more rigorous explanations as to how participants should conceive of the maps, although this would further limit individual expression through each map. Some of this confusion might be inherent to the process of communication. While maps might be designed that could be more easily interacted with by a majority of Mount Hood National Forest's "public," given the diversity of the public and known cultural differences (among other differences), the creation of a perfect base map seems unlikely. In any case, it seems critical that the *process* of cognitive map-making by individuals be revealed in the presentation of the research.

Another problem that was encountered in the cognitive mapping process involved the contact point between the researcher and forest visitors and local residents. It seemed

that while many contacted participants were familiar with the idea of participating in a survey or the initial interview part of my research, as soon as the map idea was raised the experience became something novel and solicited a variety of responses, both positive and negative. One self-proclaimed market researcher in a group of three people who I contacted near Timberline Lodge explicitly stated that he was skeptical of surveys (which he initially thought that I was approaching them with) but was interested in participating because he was curious about the map. Others didn't seem to take the map very seriously as something that could really mean very much since they didn't feel that they knew enough about the forest to represent it.

Curiously, many of the women that I talked to at all but one site (Trillium Lake) were very leery of the map idea and consistently those who were with men deferred to them with regard to the maps. Even the one woman who did not seem daunted by the map idea gave the men she was with as much time as she herself took to draw on the map although she was the only one of the three in that group who had ever been to the forest before. Of the forest visitors, very few of the men that I approached turned down my invitation to participate in the mapmaking exercise while quite a few women did. After I had about 6 completed maps in hand while at White River Snow Park one day, I realized that only one of the maps had been made (partially) by a woman (though I had approached other women). At that point I explicitly sought out female participants.

My recruitment technique had been to approach people who were standing or sitting around or otherwise did not seem terribly busy. In trying to find women to approach, I realized that most of the women that I saw around White River snow park (and there were nearly as many as there were men - not counting the large boy scout groups that had snow camped there the night before) seemed busy hurriedly preparing to depart (or traveling) with groups by snowshoe or skis, and/or taking care of children. There seemed to be many more "approachable" men. One woman who was video-recording her boyfriend and a small child playing in the snow sounded enthusiastic about participating when I mentioned that I would ask some questions but when I mentioned the map part, she said that really I should talk to her boyfriend because he knew the forest much better. When I told her that it didn't matter and that I was explicitly trying to get perspectives from women, she still declined. Another woman that I talked to in a similar manner finally conceded to participate on the grounds

that she and her husband would do it together (*he* was really eager to participate). During the cognitive mapping portion, she left twice to check on her kids who were playing in the snow nearby.

It had been difficult to find women to participate at Timberline Lodge, White River and Snow Bunny snow parks. At Trillium Lake, however, on the particular day that I was there, I found it much easier to find women to talk to. Both of the women that I interviewed and did the cognitive mapping exercise with were at Trillium Lake itself, sitting by the lake and looking at the view of Mount Hood. They had cross-country skied in about two miles to get there. On my way out to and back from the lake I met about 10 other women and perhaps two men. A friend who lives in Government Camp, a woman who often skis herself at Trillium Lake, said that the reason that she skis there (often by herself) is that she feels safer than in other places nearby. Perhaps this is because it is a popular place to cross-country ski (more people around) and perhaps also because she is very familiar with it. In any case, when there were fewer men around, the women that I talked to (one by herself and the other in a group with another woman and a young girl) seemed more willing to participate in the cognitive mapping exercise.

Although I have drawn attention to some aspects of my experiences with cognitive mapping which complicate the direct use of the visitor-created maps to represent people's perceptions of nature, the maps *were* extremely helpful as a medium through which certain aspects of relationships with the forest were encountered that I think would have been much more difficult to get at through questions alone, especially during such short periods of contact with visitors (generally about 10-15 minutes). Especially for those who were excited about the map idea, the map provided a way for them to delve into thinking about their experiences on the forest and the process of drawing on the maps generated narrative about their experiences at different times and places.

For an immigrant from Romania that I talked to (who has lived in Portland for the past nine years), I learned through his interaction with the map that his relationship to the forest was quite involved (compared to many other visitors that I talked to through my interviews) and he indicated having been to many places on the forest that are "off the beaten path" as well as to more popular places such as Timberline Lodge. He also expressed curiosity about certain other not-so-well-known places that he had heard of and wanted to

go to. Through this process of talking about places, he revealed ways in which his relationship to the forest and perceptions of the forest had changed quite dramatically over the first few years that he lived in Portland.

This Romanian man's English was very good, although some of my questions were interpreted in different ways than I intended. Through the map exercise, however, once we came to a basic common understanding about each category to be represented by color (notes were taken regarding this process) the map provided a means for facilitating discussion about different places on the forest that we were not directly in contact with. Since we both seemed to have had previous contact with maps of the forest, the base map that he interacted with in the development of his own map served as a common ground for discussion.

Research as Performance

Issues of performance also surround issues of representation. Participants are performers of identities with relation to nature and the forest. Jonas, Stewart and Larkin (2003) discuss ways in which audiences (active or passive) are necessary for the establishment of wilderness adventurer identities. In a similar way, I acted as an audience to participants when they were representing aspects of their identity with relation to the forest.

A mountaineer that I did some mapping with went into great detail about his knowledge of the glaciers near the summit of Mount Hood to the exclusion of representing any other part of the forest, though from our conversation I could imply that he was familiar with other areas. (This participant was also someone with whom I experimented with not using the map template as a base - he was given a blank sheet of paper allowing him an increased amount of performative freedom). Although a participant may use his or her interaction with me as a researcher to establish or reinforce a desired identity in relation to nature and Mount Hood National forest, the degree to which a participant "takes control" of the performance certainly depends a great deal on his or her personality in relation to the interpretive frames that I construct.

As a researcher involved in these performative acts, I had significant control over the "interpretive frame[s] within which the messages being communicated [we]re to be

understood" (Bauman 1984, p. 168). I framed the research when I present it to potential participants (perhaps I might have found ways in which women, in certain circumstances, would have been more receptive to the idea of maps through my presentation of the idea) and *I* was the performer at this point. I also framed the performance that I invited participants to engage in (by providing base maps of the forest, for example) and then framed the final research product for my audience in this written.

The Ecology of Representation

When each research interaction was finished, I had an interview guide with scribbled notes and a colored map from each participating visitor and local resident. My initial hope was to use the maps almost directly; to compile them and present them as representations in themselves. I have been skeptical about using the maps to speak for themselves. This is in part due to some of the hidden complications encountered in the process of mapmaking that I recorded in my field notes and discussed a bit above. It seems essential, in presenting my research findings, that I reveal, to the greatest extent possible, the complications and interactions that arise; between participants and the research media, participants and myself, as well as participants and each other. One final example of problems surrounding the visitor-produced maps being taken as definitive representations in themselves is revealed in the following research notes:

> The woman and her husband [that I referred to earlier who decided to co-participate] answered some of my questions together and for some questions had conflicting answers which I tried to represent in my notes. When I brought the map out, however, the man was very enthusiastic and took possession of the map and pencils while the woman looked over his shoulder. He gave reasons for why he was marking certain areas as he did and he did respond to some of his wife's suggestions for areas to mark, although some suggestions were ignored as he colored in other areas. The woman seemed slightly frustrated and/or disinterested (though she did not voice this) and walked off twice to check on their children. When she returned each time I gave her the colored pencils that he had already finished with, updated her on what she had missed and asked her if she wanted to add anything. She always took the pencils, but never did personally add anything to the maps with them.
>
> Very explicitly, when I asked the two to indicate "good places to learn about nature," the man began marking some rivers on the Clackamas Ranger District where he remarked that a great diversity of unique ecosystems were easily

> accessible by road. When his wife remarked that she thought that he should also indicate Timberline Lodge because of the easily accessible alpine meadows, he hovered with the colored pencil over that area skeptically and then started talking about another more remote (yet accessible) part of the forest. Through observing this interaction, it seemed that the man was interested in explicitly not associating himself (and his wife perhaps too) with more developed parts of the forest such as Timberline. The husband and wife both were wildlife biologists and did have a certain sort of "insider" perspective towards the forest. The final map that "they" created did reveal an identity with relation to the forest that was other than an identity as an "average tourist." It was apparent, however, that the final map that the two created was not as representative of the woman's views of (or ideas about representing identity in relation to) the forest as it was of the man's.

Nature itself is certainly difficult enough to aptly or adequately represent, as any honest ecologist might tell you, but trying to represent people's perceptions of nature involves another potentially infinite layer of complexity. In trying to simplify our conceptualizations of nature or people's perceptions of nature in order to represent them, it seems to make a lot of sense to think (and represent) in ecological terms. To think in terms of how parts interact and interdependently co-exist rather than solely in terms of how they can be simply described or reduced into decontextualized products.

I delved into the use of cognitive mapping hoping to learn more about people's perceptions of nature in a particular place. Through a consideration of representation I wound up unearthing something about gender and performance in relation to nature. Hopefully in this process (and through the representation of this process), I can reveal something more meaningful than some of the current (questionable) statistics on National Forest visitation (e.g. almost 70% white and more than 90% male, about 23% of which are "driving for pleasure") (Forest 2003).

The U.S. Forest Service relies on representations of "the public" when making management decisions. According to current bureaucratic paradigms within the agency, the results of qualitative research methods may be taken as "merely anecdotal" while the results of quantitative surveys are taken as representations of what is "really out there." Through a rethinking of representation in terms of ecology, perhaps more meaningful representations of "public nature" on public lands may begin to emerge *and* be recognized. This idea is discussed further in the last chapter of this thesis.

CHAPTER VI

CONSERVATION EDUCATION: A CASE/PLACE STUDY

People don't agree about what National Forests should be about. People just plain don't agree. There's some that don't think a stick of timber should ever be cut again, there's some that believe that the only appropriate view for looking at most of National Forest land is looking at it with economic utilitarian terms. Those are deeply held beliefs, and they're not intrinsically right or intrinsically wrong, but it's based on a value set and those value sets are not resolved. The reason they're not resolved is because we're still a young country, we're still a young people, we don't have a single common heritage that we can look to to draw our basic values from, or to figure out our relationship to the earth. We've got many, many, many different views about what our relationship to the earth is and that's where conservation education comes in. I believe that the most important challenge before us is figuring, as a society, NOT Forest Service, as society, figuring out how to take care of the earth so in the long term it can take care of us. I really think that that's the challenge before us because of the number of people, because of the huge and voracious appetite of the economic engines of the world economy, our biggest challenge is figuring out how to take care of the earth so it can take care of us. And that's where conservation education comes in.

- Mount Hood National Forest supervisor, Gary Larsen, September 2003

Introduction

In this chapter, some issues pertaining to conservation education by the Forest Service on Mount Hood National Forest are explored. I draw from my research done with Forest Service employees, visitors to the forest, and local residents as well my experiences working and living on the forest. My intention was to use a specific context in order to explore the subjects of "the public," and "nature" (while conscious of the difficulties of representation) in order to bring together theory and practice. I hope to have done this in a way that might be meaningful to management directions on public lands and specifically on Mount Hood National Forest.

A major question underlying this thesis is to what degree the representations we create of Mount Hood National Forest reflect lived experiences there and/or reflect conceptualizations of Mount Hood National Forest as a meaningful place. In addition to a consideration of theory, and a consideration of previous research relating to such questions,

a significant part of my project has been to engage in my own research and representation as a way to engage the theory in practice. In this chapter I present the bulk of this research, although it has also infiltrated other chapters.

I have chosen to structure the presentation of the core of my research around some particular categories relating to conservation education efforts by the Forest Service on Mount Hood National Forest. Some of what I present is structured around specific questions that I asked and some relates more to questions that *participants* raised through their own involvement in the research. Conservation education was chosen as a focal subject both because it is a point where the Forest Service and public come into direct contact with one another in relation to "nature" and also because conservation education is a current, unresolved management issue on Mount Hood National Forest. This is particularly the case on the Zigzag Ranger district where most of my research took place and where most of my experiences on the forest are from.

What is Conservation Education?

Directions and Complications

Conservation education is the term by which the Forest Service refers to educational efforts that they engage in with the public. These efforts include public education and outreach and often imply "environmental education." According to a 1999 Forest Service report entitled *Conservation Education in the Forest Service*,

> The purpose of Forest Service conservation education is to connect people to the land by providing them the tools they need to take informed actions related to sustaining natural and cultural resources (CEFS 1999).

Conservation education is something that the Forest Service has been doing for a long time, but these efforts have not always been very well coordinated due, in part, to unclear direction in this area. In September of 1996, the Directors of the Cooperative Forestry, Recreation, Heritage & Wilderness Resources and Wildlife, Fish & Rare Plants staffs and the Office of Communications commissioned a task force to "develop a national corporate

vision for all educational programs of the Forest Service" (CETF 1997). The task force was directed to "develop a clear, forceful strategy to accomplish Forest Service education and outreach goals in a prioritized fashion" (CETF 1997). The following questions were to be addressed by the task force:

- Should "educating the public about natural and cultural resources" be a Forest Service priority?
- What should the main themes be in educating the public?
- Who should our target audiences be?

(CETF 1997)

The 1999 report seems to be a fruit of this task force and in it, the above questions are answered and the purpose, a mission, objectives and strategies for implementation are presented for fiscal year 2000 implementation (CEFS 1999).

In the summer of 2003, when I worked as an intern with part of my job description as "Conservation Education Coordinator" on the Zigzag Ranger District of the forest, these very same questions were still being asked (six years after they were written and four years after the second report supposedly answered them). In an interview with Gary Larsen, the present Mount Hood National Forest Supervisor, he said

> I truly believe that my most important job and the most important job of the people that work on the forest is conservation education. The challenge is that the amount of money we get to do that is zero. Maybe we get a little bit, but so little that it's embarrassing to talk about how little we have for conservation education. Yet on our forests, and I think that it's particularly because it's an urban forest, many, many people on the forest have a sense of how important conservation education is.

A recognition of the importance of conservation education, to at least some degree, was almost unanimous amongst the 25 Forest Service employees that I interviewed[15]. These interviewees also agreed that the money and direction were simply not there to support

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[15] Here it should be noted that although everyone that I talked to agreed that conservation education was important to at least a certain degree, not all agreed on what conservation education is. This will be addressed in a latter part of this chapter. It also should be noted that support for conservation education is not unanimous throughout the agency. Being a very hierarchical agency, however, it is quite significant that the current forest supervisor puts emphasis on this aspect of management.

conservation efforts on the forest (by the Forest Service). The current forest supervisor explained this to me in terms of the conservative nature of the United States Congress as part of the way, he said, that the U.S. government is designed to work effectively, so that we don't have violent upheavals every so often. Through appropriations from congress, the Forest Service is whatever it is. Many Forest Service employees that I interviewed referred to "job codes" which relate to "budget line items" or in the Supervisor's words, "strict marching orders…pretty strict expectations about what we do, how we do it and how much of it we do." For every hour that is worked on the forest, an employee must give a job code that the work was done for. There is apparently no job code for conservation education despite the fact that the 1999 report states that "beginning in FY 2000, the national conservation education program will be funded as a program, rather than as a national commitment" (CEFS 1999).

As a forest supervisor that professes strong support for conservation education and recreation in general on the forest, it seems that Gary Larsen's management of the forest is still largely limited by the perspective that congress takes towards these issues. He related a story to me from a number of years ago when he asked the General Counsel of the Senate Agricultural Committee about the status of recreation on National Forests.

> I said, "it puzzles me. Here the Forest Service has more recreation than all the other public agencies put together in the country. More people use our facilities, we have more capital investment facilities, we have more roads to get into recreation facilities, yet congress doesn't really regard us as much of a recreating agency. They don't fund it much. How does this make any sense in the world?"…and [the General Counsel] said, "you don't understand, Gary, the Forest Service is not a recreatin' agency…you're our road buildin', timber cuttin' agency. The National Park system is our recreatin' agency. Just keep that in mind and that will help you keep things straight."

Although forest supervisor Larsen seemed to think that congress had changed some since that conversation, he still thought that it would have a long way to come before conservation education would be a priority "from above" for the Forest Service as an agency. When I asked him if more value was being placed on conservation education and recreation now compared to when his conversation with the General Counsel took place, he replied with the following:

> Value is a loaded question, because you could have different ways of looking at it. You could say, one, 'what's in the hearts and minds of the people that work for the agency?' That's one source of value. Another source of value is 'what's the cultural norm in the agency?' Another source of value is the fifty different items that congress funds us for every year. What value set does *that* reflect?

Through my interviews, conservation education did seem to be strongly in the "hearts and minds" of the people that I talked to. It could also be argued that it is a cultural norm in the agency (addressed in what follows). Funding seems to be another matter all together. When asked what they saw as the greatest hindrance to their own efforts to implement and promote conservation education on the forest, the four district rangers that I interviewed had similar responses which are listed in Table 1.

Table 1. Ideas about Conservation Education by the 4 Mount Hood National Forest District Rangers. These are the responses of the four district rangers on Mount Hood National Forest to the question "What is the greatest hindrance to your own efforts to implement and promote conservation education on the Forest?"

What is the greatest hindrance to your own efforts to implement and promote conservation education on the forest?
• "We have a congress that appropriates a budget, that has expectations for us to achieve certain targets or objectives and they don't really identify objectives or targets associated with conservation education."
• "Conflicts with other things going on, conflicts with mandated targets, not saying that it's our role to do that."
• "Getting people to be willing to do the work despite the fact that they've got a full plate already."
• "Without whining, I'd have to say shortage of people...without extra people, you don't have time to do proactive stuff, you're doin' more reactive stuff."

A lack of structural support for conservation education is perceived to exist by the district rangers and this was a common theme throughout my interviews with other administrative-level employees. Congress does not seem to value conservation education by the Forest Service and until it does (under the present hierarchical structure of the agency), conservation education may not easily find better direction toward a more successful existence within the agency. In one sense, my research is intended to elucidate values of, as well as complications involved with, conservation education on a particular National Forest in a place-specific way. Through this project, perhaps, opportunities within the hindering structure of the agency may be found for better implementation of conservation education. Perhaps a need for larger structural changes within the agency might also be recognized.

Conservation Education as a Cultural Norm on National Forests

According to the 1997 report by the conservation education Task Force (CETF 1997), conservation education on National Forests goes back to the early 1900s when it was basically considered "a nice thing to do" and was considered to be a role for women, perhaps partly because there were women such as Priscilla Edgerton ("The Forest, a Handbook for Teachers," 1927) and Margaret Mount-March ("Penny Pines" fundraising effort) who took leading roles in it. In 1928, conservation education more formally entered the Forest Service's agenda in the Forest Service Manual published that year that noted the importance of education to "promote the best use of all forest resources in the country, public and private" (CETF 1997).

During World War II it was feared that forest resources could be destroyed by an enemy attack or sabotage and the Cooperative Forest Fire Prevention Program (CFFP) was organized to encourage people to make personal efforts to prevent forest fires. In 1944, Smokey Bear was introduced as a campaign symbol which found huge success in reducing numbers of human-caused fires and still is an image/icon that persists to this day (despite problems with his historic, blanketing fire prevention message in a present situation in which fires are scientifically recognized as an important part of ecosystems). Woodsy Owl was another Forest Service conservation education mascot established by Public Law 93-318 in 1974 as a "symbol for a public service campaign to promote wise use of the environment

and programs which foster maintenance and improvement of environmental quality" (CETF 1997). In 1953, the Forest Service launched a Junior Forest Ranger program. The desire to continue with programs such as Smokey Bear, Woodsy Owl and the Junior Forest Ranger program were reaffirmed in 1996 (CETF 1997).

In the 1950's, efforts to provide visitors with information and interpretive services began. In 1962 these efforts were formalized with the beginning of the Visitor Information Service program (later changed to "Interpretive Service") (CETF 1997). Over the next few decades, "25 major visitor centers and hundreds of interpretive sites and information centers were built and staffed" (CETF 1997). In 1997, the annual visitation to visitor centers and IS sites was about 12 million people (presumably per year) (CETF 1997). Legislative support and funding further supported conservation education on National Forests with education recognized "as a mechanism for improving the quality of the human environment" (CETF 1997). Some policies included the National Environmental Policy Act of 1969 (P.L. 91-190), the National Environmental Education Act of 1970 (P.L. 91-516) and the National Environmental Education Act of 1990 (P.L. 101-619), among others.

What Forest Service Employees Think Conservation Education is

Do you see conservation education as a potential common thread to bring people together?

I do, but it's been a real struggle. It's been an extreme struggle here and elsewhere and I would say that regionally and nationally our agency hasn't done as good of a job as it could because everybody has a different vision and idea of what conservation education really is...
(A forest biologist on Mount Hood National Forest)

In my interviews with Forest Service employees, I asked employees to define conservation education. Not surprisingly, I encountered a wide variety of responses, and while there were common threads running through all of the responses, different aspects of conservation education were emphasized and different conceptualizations of "nature" as well as different conceptualizations of "education" were utilized.

In each of the responses given, the words used to refer to ideas about "nature," what some considered to be the focal point of conservation education, varied. The various terms used in order of frequency were "natural resources," "resources," "environment," "nature," "ecosystems" "processes," and "the land." Almost all participants used one or more of these terms in their explanations of conservation education. Among supervisors and line officers that I interviewed, "natural resources" was the term most commonly used, although not universal, while science-oriented employees most often used the term "ecosystem." Field staff often didn't use any of these terms at all, but rather it just seemed to be assumed that they were talking about "nature" (or whatever term one might choose to use) when they talked about the importance of "teaching ethics" or "giving people tools to go out and learn more about the world."[16]

In relation to more of the "education" part of conservation education, I encountered even greater variety in the ways that participants responded to my question about what they believed conservation education to be. In the Table 2, I have attempted to categorize all of the responses that I received in terms of what employees seemed to see as the "point" of conservation education.

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[16] I wondered if different "communities" within the agency (e.g. administrative and those who work more in the "field" or between different programs) might have different common vocabularies that they use to refer to different aspects of forest management. This might be an interesting study. Different language for talking about the work that they do (or that they think that the Forest Service should do) in different parts of the agency might indicate distinct communities within the agency, since communication perpetuates language usage. It might also indicate areas where there does not seem to be a lot of communication. Some differences in ways of speaking might also have to do more simply with the nature of the specific work that people do and therefore how they might conceptualize something such as "nature" or "natural resources" accordingly. Each of the terms used have different connotations and associations and while each of the terms could be used to conceptualize certain aspects of the forest, there are significant differences between conceiving of a forest in terms of "natural resources" or in terms of "processes."

Table 2. Conceptions of Conservation Education by 21 Mount Hood National Forest Employees. Employees responded to the question "what is conservation education" and here the responses have been broken down into categories that were intended to elucidate the major ideas that were addressed.

Conservation Education is about:
Knowledge
Increasing knowledge...(leads to values and conservation)
Inform the public
Specialists teaching people
Providing tools to knowledge
Emotions
Emotional attachment...(leads to values and conservation)
Awareness
Increasing awareness...(leads to values and conservation)
Information about what's going on
Values
Establishing values...(leads to conservation)
Teaching ethics
Relevance
Establishing relevance to daily lives...(leads to conservation)
Relationships/Involvement
Developing people/forest/"nature" relationships
Responding to public educational interests
Getting people involved with forests and "nature"
A foundation for people who use the forest the most
Educating each other within the agency
Messages
Giving messages...(leads to values and conservation)
Messages should be oriented to specific groups (and their interests)
Messages should be brought to people (e.g. in city)
The Forest Service itself
It is an important role of the Forest Service (FS)
This is a primary way by which the public interacts with the FS
It is part of the Forest Service's role in ecosystem management
Everyone should be doing conservation education
It's not my personal job

Many responses included combinations of various categories listed in Table 2, while other responses focused on emphasizing a particular category. For example, here is one response that I have taken to incorporate the above categories of "emotions," "values," "relationships/involvement" and "The Forest Service itself:"

> I think that conservation education is part of all the work we do in public land management. Conservation education merely means, uh, emoting and/or expressing the value of natural resources and people, natural resource relationships, natural resources and the continuum....it's about everything we do!

Another response recognized the importance of "natural science education" but then continued on to focus on the subject of ethics. This district level employee said that "...to me conservation education has to be [natural science education] but also has to go broader. It also has to include Leave No Trace education...for me the main thing is teaching Leave No Trace." Among employees involved with working with the public in relation to backcountry trails and Wilderness areas, this sort of focus on ethics was common. These same employees also related their experiences of commonly finding excessive amounts of toilet paper and other litter along popular trails.

One of the most unexpected responses that I received was from an employee who expressed a need for conservation education to also focus within the agency. This person referred to a lack of communication regarding conservation education "messages" and therefore inconsistency within the agency. This meant that "well-meaning" Forest Service employees were acting in ways that other people in other programs were advocating against through their conservation education messages. An example of this would be wilderness regulations not being properly ascribed to by Forest Service employees carrying out their daily work. Another example would be the fire program as teaching people how to put out campfires in ways inconsistent with Leave No Trace ethics.

Some of the responses that I received conflicted with one another. For example, some employees conceived of conservation education as an important part of everyone's job in the Forest Service, while others conceived of conservation education as perhaps important but yet not something that they should have to do themselves. Some conceived

of conservation education as "value-free" knowledge, yet others conceived of conservation education as first and foremost being about imparting values to the public.

Although most employees that I interviewed expressed at least a certain degree of interest in conservation education, a few did not. A few employees, as mentioned above, conceived of it as something nice to do, but really not pertinent to their own position in the Forest Service. There were many other things that they do that they conceived of as much more important. One employee in the fire program thought that current conservation education involved a lot of effort focused on a select few people and that it has not engaged the interests of a true "cross-section" of the public ("bird walks" were referred to rather derisively, although Smokey Bear was given as an example that has been successful). However, many of these employees who seemed to think less favorably of conservation education, did still know how to "speak the language" of it. The same person who thought that most current conservation education (i.e. "bird walks") wasn't very meaningful to most people, initially responded to my question about what conservation education is with the following statement:

> [Conservation education is] informing the public on current issues or things we think are issues. Things that are important to us. We have different disciplines, each is pretty integral. Everybody wants a say informing people on the processes of what makes the forest work (everybody's not interested in hydrology, but it's integral to what makes the forest work).

In asking what conservation education "is," it became clear that just like "nature" and "public," "conservation education" is a complicated topic. While there have been national efforts to clarify an agency definition and facilitate its implementation, on the level of an individual National Forest such as Mount Hood, direction still seems to be very diffuse. Quite interestingly, when employees were asked whether or not they thought that conservation education was working on the forest, people responded with both 'yes' and 'no,' qualifying their answers with the ways in which they were thinking about it.

In terms of specific conservation education efforts, such as Cascade Streamwatch[17] or an effort on the Clackamas district in the summer of 2003 that reached 400 grade school students in a week, or specific anecdotes about programs that individuals were involved with on smaller scales, responses were overwhelmingly positive - that conservation education was indeed working. It was often emphasized, however, that these "successes" often developed out of extraordinary circumstances which usually involved a couple of highly enthusiastic and motivated individuals who went out of their way to make it happen despite it not being part of their regular job description. Responses regarding the success of conservation education were generally quite negative, on the other hand, when it was thought of in terms of the structure of the agency. This again relates to what was discussed earlier involving congressional mandates and the fact that conservation education is not "written in" to people's job descriptions.

While there seem to be many complicating layers of how Forest Service employees conceive of conservation education, individuals do seem to have some common ideas about ways in which it is and isn't working. It *is* working in specific scenarios according to specific definitions of what it is, but it may not be working so well from the perspective of support from the agency as a priority. I experienced this through part of my summer internship there when I was supposed to try to get volunteers to help with the conservation education portion of an autumn festival that the Forest Service and local communities were collaborating to organize. I met a lot of resistance and downright resentment from some employees. This resistance came both from employees who did not see the value in participating as well as from those who did, but did not feel like they had the time to devote to it with "a plate so full that I'm not even sure that there's a plate there anymore."

Two main concerns that seem to need addressing for better implementation of conservation education are:

1. Implementation of conservation education is not built into the structure of the Forest Service as an agency. Are there ways that it can be?
2. Conservation education is conceived of in many different, sometimes conflicting, ways. Is it necessary to have a united vision for its effective implementation?

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[17] Cascade Streamwatch is a Conservation Education program that is done with Portland schools by the Forest Service on BLM (Bureau of Land Management) land adjacent to Mount Hood National Forest in partnership with Wolftree, a non-profit environmental education organization.

A response to these questions has been to advocate for increasing partnerships with non-Forest Service agencies in order to help take some of the burden for conservation education off of the Forest Service. Another response has been to develop unified goals and objectives for conservation education, such has already been done on the national level (CEFS 1999).

The approach of advocating for partnerships was often emphasized as *the* new direction for the Forest Service in my interviews with employees at the administrative level. Presently on the forest, conservation education is being addressed through a recent development that one employee referred to as a more "holistic" approach to the issue, a Community Action Team (CAT). This team is supposed to address conservation education, volunteers and partnerships in a unified way. A problem that arises with an increase in reliance on partnerships for doing conservation education, however (as some employees raised), is that while theoretically taking the burden for doing conservation education off of the shoulders of Forest Service employees, developing partnerships *itself* takes a lot of time and investment. Additionally, *who* will be giving the messages of conservation education?

Employees as well as forest visitors that I interviewed expressed the importance of direct contact by the public with Forest Service employees in terms of the public image of the Forest Service and the meaningfulness of interactions. There is still a lot of "romance" and respect associated with the forest "ranger" in uniform. Additionally, a number of Forest Service employees that I interviewed expressed that their own career paths in forest-related fields, as well as their own concerns for forest stewardship, had very much to do with positive experiences that they had with forest "rangers" when they were young.

At the time of my interviews, I had not yet discovered the 1999 conservation education report (CEFS 1999) which lays out goals, and objectives for conservation education by the Forest Service. Not one of my interviewees explicitly referred to this report, although many people, especially at the administrative level, spoke of a perceived need for unified conservation education goals and objectives to be established and forest-level efforts that had been made in the past in this direction. After one interview in which this idea was particularly stressed, I started asking others in interviews whether or not there were indeed goals and objectives for conservation education that had been laid out on the forest. Answers ranged from "I think so, but I'm not sure what they are" to resolute "No's."

Furthermore, the following conflicting opinions were expressed with regard to development of goals and objectives:

> *One view:* You know they've had a couple of conservation education groups, um, I was working as a mentor for the conservation education cadre for a while and tried to get them to focus on some of those things but they really had people who were the doers not the strategic thinkers who were on that team. The GS-7's[18] were on that team and um that's not a criticism of GS-7's, but most people at that level aren't exposed to the strategic thinking and the planning and the knowing how to get things done, at their levels and so they really needed some help from 9's and 11's.
>
> *Another view:* Let's just not have high paid people coming up with strategies and plans. Especially if management is not going to back it. Go to the state and see what goals and objectives there are already and see where we can help out with that, where it matches our interests. We totally miss opportunities, though.

It became clear through my interviews, as well as through my own experiences, that while conservation education did not seem to be very efficiently coordinated on the forest, some conservation education was indeed occurring. Through more cohesiveness and efficiency, likely much more conservation education could be accomplished, fulfilling national conservation education task force directive that "educating the public about natural and cultural resources should be a Forest Service priority" (CEFS 1999, p. 11). (This was also a commonly expressed opinion in my interviews.) This inefficiency of conservation education on Mount Hood National Forest seemed to be nested within a larger problem, however. This was an apparent lack of communication between different levels of the Forest Service and between forest-level programs.

While there had been national efforts to coordinate conservation education by the Forest Service, not one interviewee referred to those efforts specifically. Numerous interviewees did refer to forest level efforts to improve conservation education, but these efforts seemed to have "fizzled out" and a "new wave" of efforts was being initiated, with the addition of partnerships and volunteers to the discussion. Some employees expressed significant frustration at energies and efforts that had put into efforts to better coordinate

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[18] The Forest Service uses the "GS" pay scale of the US government where entry-level positions are generally GS-3 or GS-4 and increasing numbers correspond to increasing experience and salary up to GS-12.

conservation education that didn't really go anywhere and were now being reinitiated in a different form.

Through improved communication within the Forest Service, it seems that improved communication between the Forest Service and the public could occur, i.e. better conservation education. How better communication could be implemented is another very significant problem to be overcome. Perhaps this problem mirrors the problem faced by the Forest Service in trying to better implement conservation education.

Motivation to Come to Mount Hood National Forest

For the Forest Service trying to implement conservation education on Mount Hood National Forest, it is important to understand why people are coming to the forest. Such an understanding can help employees design and implement more meaningful and effective programs that both enhance visitor experiences as well as public stewardship of the forest. In my interviews with Forest Service employees, this topic of people's motivations for coming arose when asked what they thought the Forest Service needed to learn from the public regarding conservation education. A consideration of what motivates people to be interested in "nature" or the outdoors in general is also pertinent to this discussion.

People go to Mount Hood National Forest for various reasons, for example, to work, to play or relax or even because they live there on private in-holdings or in government housing. Certainly people also go the forest for combinations of reasons as well as for reasons that might not be so neatly categorized. In this sub-chapter I attempt to represent various reasons that participants in my research gave for coming to Mount Hood National Forest when explicitly asked. I also compare this to reasons that people gave for *other people* coming out to the forest. It is then considered what motivated Forest Service employees themselves to become interested in working for the Forest Service and in "nature"/the outdoors in general.

Reasons Given for Visiting Mount Hood National Forest

While the results of this portion of my research might not demonstrate general trends (since only ten visitors were interviewed that could not even begin to be considered a

cross-section of the public), they do give more depth than mass surveys and a sense of the wide variety of reasons that some people might give (when asked in rather informal ways) for coming out to the forest. This might prove useful to survey designers who could test how widespread these ideas might be. Certainly a more diverse initial research population would be critical to obtain if a survey were in fact to be created. This is one way that qualitative research can be used to inform the design of quantitative research (e.g. Schensul et al. 1999). This research also might point to ways that previous visitor-use surveys have been done on Mount Hood National Forest so as to present possibly misleading results.

In my interviews with ten winter visitors to Mount Hood National Forest, 28 specific reasons for coming out to the forest were noted. These were reasons that people came up with on their own without specific solicitation (for the types of answers they should give) on my part. The various questions that I asked related to why they were out on the forest on the particular day that I talked to them, how they would characterize their particular involvement with the forest, and/or what their most common reasons for coming out to the forest were. The reasons given in these unstructured interviews are shown in Table 3 (in order of frequency, with frequency noted in parentheses):

Table 3. Reasons Given by 10 Winter Vsitors for Coming to Mount Hood National Forest. The reasons given are noted in order of frequency with frequency in parentheses beside each reason. An asterix indicates that this particular reason for coming to the forest had no way of being represented in the most recent visitor use survey of the forest (NVUM).

Skiing (8)
Hiking (6)
*To Visit a Specific Place (5)
Camping (4)
Fishing (4)
Backpacking (3)
*Volunteer Work (3)
*Attempting to Work or Volunteer for Forest Service (2)
Biking (2)
Cross-country Skiing (2)
Fire Towers (to stay in them) (2)
Kayaking (2)
*Personal Heritage? (came as a kid) (2)

...Table 3 continued...
Scenery/Viewing (2)
*Teaching/Helping Others Appreciate Nature (2)
Boating (1)
*Climbing Mount Hood (1)
*Coming with Friends (1)
*Enjoying the Outdoors (1)
*"From a woodsy town and I respect that [about the forest]" (1)
To get Away From the City (1)
*Golf (1)[19]
Hunting (1)
*Reminds me of Another Place (1)
*Snow Play (1)
Snowboarding (1)
*Solitude (1)
Timberline Lodge (1)

A diversity of reasons were given by visitors for coming to Mount Hood National Forest. Since I only interviewed ten forest visitors, these reasons should not be taken as representative nor all-inclusive. It is also likely that with a different format for my interview, different results could have been obtained with the same people. The ways in which people represent reasons on their own are sure to be different than the ways in which people respond to pre-given reasons. If I had provided a list such as the one above, for example, and had people tell me which were reasons that applied to them, the frequencies for many categories would have likely been different. It is very likely that more than one person would have indicated Timberline Lodge as a reason for coming out to Mount Hood National Forest, especially considering that about half of the interviews that I did took place there. A lot of the responses made a lot of sense to me while others were not necessarily anticipated. I found it particularly interesting that half of the interviewed visitors gave specific names of places as reasons for coming (e.g. Badger Lake, Bagby hotsprings, Lost

[19] There are currently no golf courses on Mount Hood National Forest. This man who said that he came out to Mount Hood National Forest to play golf indicated that he was referring to a resort in the nearby town of Welches, which borders on the National Forest. He noted that to him, that was Mount Hood National Forest too.

Lake) and while many of these sites are popular places, not all places named were so popular (e.g. Paradise Park) and most were not popular sites that I would have anticipated to be mentioned (e.g. Trillium Lake, Timberline Lodge), considering that my research was done mostly in the Highway 26 corridor.

The National Visitor Use Survey (NVUM 2004) is the most recent visitor use survey that has been done on Mount Hood National Forest. In the only question on the survey that asks for visitors to indicate activities they participate in during forest visits (specifically the one during which they were questioned), a number of important activities recorded in my research were not even options for visitors to choose among the 26 activities that *were* included. Those not included are indicated with stars on the above list (NVUS 2001)[20]. Some of these were likely "missed" in the original list (e.g. climbing Mt. Hood) because the surveys are not place-specific. They are intended for use on National Forests nationwide. Other reasons might not be so easily excusable[21], for example "snow play" or "volunteer work."

Reasons Given for *Other People* Visiting Mount Hood National Forest

When visitors were asked for reasons why they thought that *other people* visited Mount Hood National Forest, I noted 18 different responses. Only seven of those responses had also been listed previously as their own reasons for going among the people who I interviewed. The reasons given are shown in Table 4.

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[20] The full list as it appears on the NVUM survey is reprinted in Appendix E.

[21] *Is* it "excusable" for the Forest Service to rely on generalized national surveys for understanding something about a specific place?

Table 4. Reasons Given by 10 Winter Visitors for *Other People* Coming to Mount Hood National Forest. The reasons given are noted in order of frequency with frequency in parentheses beside each reason. An arrow indicates that this particular reason for coming to the forest had not previously been given by the same group of visitors in their *own* reasons for coming to the forest.

→Close to Portland (3)
Recreational Uses (2)
Timberline Lodge (2)
→Accessibility (1)
→Easy Wilderness Access (1)
→Highway (1)
→Extensive Trail System (1)
→"Tremendous year-round resources" (1)
→"Wide variety of activities" (1)
Beauty (1)
→Fun (1)
Camping (1)
Fishing (1)
Hunting (1)
→Rivers (1)
→Ski Areas (1)
Skiing (1)
→Recreational Vehicles (RV's) (1)

The richness of the list that was generated when visitors were asked to give their own reasons for visiting the forest, not surprisingly, was quite a bit richer than the list generated when visitors were asked to hypothesize why others visited the forest. Quite a few new ideas were generated, however, including more generalized reasons (e.g. proximity to Portland, ski areas and "fun") as well as some specific reasons that were not included as their own reasons for coming out to the forest, including rivers and recreational vehicles. It is interesting to note that the man who only listed "rivers" as a reason for *other* people coming out to the forest, talked a lot about rivers during the cognitive mapping part of my interaction with him. It was apparent that that rivers (primarily for fishing) were one of the main reasons for his coming out to the forest although he did not list it specifically as one of his own reasons for coming in the context of the questions that I asked. If nothing else, this

indicates that people can respond differently (and perhaps conceptualize their answers in different ways) depending on how they are asked about them.

Motivations of Forest Service Employees

A consideration of what motivates the public to come out to Mount Hood National Forest would probably not be complete without a consideration of what motivated Forest Service employees to come out there themselves to work. I asked a number of Forest Service employees about their motivations to choose to do the work they do and/or to take interest in "nature" and the outdoors. Responses can be seen in Table 5.

Table 5. Motivations by Some Forest Service Employees to Do the Work That They Do. The responses listed are to the questions, "Why do you do the work that you do for the Forest Service?" and "What sparked your involvement with/interest in "nature"/the outdoors?"

Why do you do the work that you do for the Forest Service?
• I enjoy the outdoors. I don't get out as much as I used to, but I do enjoy challenging public natural resource management issues and assessing how things are going.
• I grew up with a father who worked for the Forest Service, and living on National Forests. I feel like the Forest Service defines who I am.
• I like being out in the woods better than slogging away and being an engine.
• I was always kind of hooked with fish in one way or another.
• I was interested in science and working with people and what I do here brings the two together.
• I've wanted to work for the Forest Service since Junior high school. They have a real reputation for caring for the land.
• Initially I was attracted to being in the field, but not anymore...now I'm fine with not being out everyday.
• It came down to asking myself what I really enjoy doing and how I want to spend the rest of my life and my job.
• It's something I've wanted to do since I was a kid. I decided to be in the military for 20 years, but I think it paid off in the long run.
• Love of the land and wanting to preserve that for future generations.
• Originally to be out in the field a lot.

...Table 5 continued...
What sparked your involvement with/interest in "nature"/the outdoors?

- A show I saw back in the early 70's about a woman Forest Ranger. Every since then I knew what I wanted to do and was pretty determined about it.
- Boy Scouts, and hiking on Angeles National Forest...I remember seeing a ranger and wanting to be like him
- I camped a lot and was outdoors a lot when I was a kid (that fits my bias that we start making impressions on people when they're young)
- My brother and I used to raft the Mckenzie all the time and fly fish
- My parents were poor and we did a lot of camping for vacations. My brother and I were inspired by a ranger named Art...he was always in the area where we camped, you always saw him, checking tickets and talking to people. Both my brother and I got into being rangers. I also think that Lassie had something to do with it. Lassie was owned by a ranger.
- Personal nature/interest...I've always spent a lot of time outdoors and have been physically active even though I had a sister who was a total bookworm and never went outside.
- Watching the television show "Wild Kingdom" in college and Girl Scouts.

These responses may be interesting to conservation education planning efforts because they may elucidate some of the mediums of impact and influence that have had real and measurable effects. These respondents, having been influenced in the various ways that they claim to have been, are now actively doing work, and in many cases have devoted their careers to, stewarding "nature" and public lands. Might this shed some insight into the types of things that could be used to influence others in this direction? Active involvement with "nature" through outdoor activities, experiences with rangers, and the media are three key proclaimed influences that stand out in the above responses. Noticeably, all of the experiences involve influence to these participants when they were young that they never forgot.

Discussion

Visitors and local residents gave different types of reasons for self or others coming out to Mount Hood National Forest. Some reasons were activity-oriented, while others were resource-oriented, site-oriented, experience-oriented, quality-oriented or related to some sort of nostalgia. Accordingly, some of the categories listed might be thought of as different ways for representing similar things. For example, the man who gave "fishing" as one of his reasons for coming out to Mount Hood National Forest named "rivers" (and *not* "fishing") as a reason for others coming out to the forest. If asked *why* he came out to the forest to fish, he might have responded with a more experience or quality-oriented answer such as for "fun" or "solitude." When this same man was asked about his most memorable experience on Mount Hood National Forest, his response also involved a river and a specific site on Eagle Creek where he fondly remembered camping with his family during a specific period of their life. Forest Service employees gave yet other reasons that they thought to lie at the root of their own particular involvement with the work that they do on Mount Hood National Forest and/or interest in "nature" or the outdoors.

Many of the people that I have interviewed and interacted with on Mount Hood National Forest have stories about their interactions with Mount Hood National Forest that are very much intertwined with stories of their lives. It is my opinion that it is important to document these understandings and representations of "the public" and of "nature" on public lands. It is *not* enough to document and defend "multiple uses" on National Forests. "Multiple meanings" matter as well. Through the levels of abstraction that much research and representation entails, it seems that meanings are often one of the first "layers" to be abstracted out, since it is often impossible to represent meaning concisely as there are always multiple dimensions. Even through narrative, such as I have presented to contextualize some of the responses which I recorded, much meaning is lost. And this loss is in addition to the loss of meaning associated with the act of representation by participants as they related experiences to me through interviews and interactions.

Curiosity Toward Nature and Mount Hood National Forest

An awareness of what people are curious about in relation to a particular National Forest is also very important to conservation education efforts there. This was another topic raised by Forest Service employees on Mount Hood National Forest through my interviews. Through my experiences as an environmental interpreter on the forest, there were always the infamous "frequently asked questions" (FAQ's). Some of these "FAQ's" were noted in resource documents for interpreters. Others, that were not specifically listed, I experienced daily through my interactions with forest visitors. In my interviews with forest visitors, I asked them what they felt that they knew about Mount Hood National Forest and also what they would like to learn more about. Between experienced "FAQ's" as an employee on the forest and the expressed interests of forest visitors through interviews, in the following paragraphs I will try to represent certain aspects of public curiosity about the forest such as it was represented to me.

Frequently Asked Questions

Twelve different questions have been listed (MAQ 2000) as some of the most commonly asked questions For the Mount Hood Information Center, located about three miles west of the National Forest boundary on the Portland side (map in Appendix A).[22] The questions relate to the topics listed in Table 6.

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[22] While this is the present site of the information center at this writing, I recently heard that it was soon to change. Visitor information was to be relocated to the Mount Hood National Forest Headquarters in Sandy and also to the Zigzag ranger station at the western forest boundary along highway 26. "Visitor Services" are also engaged in by the other ranger districts in their respective ranger stations.

Table 6. Topics of Frequently Asked Questions at the Mount Hood Visitor Center, 2000. The topics listed were taken from an employee handout entitled "Some of the Most Asked Questions at the Mount Hood Information Center" (MAQ 2000).

Topics of Frequently Asked Questions at Mount Hood Info Center

- What to do on the forest
- Fees related to forest use (e.g. Northwest Forest Pass and Sno-park Passes)
- Weather
- Skiing
- Lodging
- Timberline Lodge
- Hikes and trails
- Climbing Mount Hood
- Mountain bike trails
- Places to use ATV's
- Roads (sights and conditions)
- Non-timber forest product permits
- Camping

Working at the Forest Service desk at Timberline Lodge, as an interpreter through all four seasons over about 2 years, frequently asked questions often related to very specific details about the lodge and mountain. Second only to "where's the men's room?" (which was more difficult to locate than the women's room) was "when was the lodge built?", "how was the lodge built?" or "what's that mountain in the distance?" (referring to Mount Jefferson) and other general questions about the immediate environment that people were experiencing when they approached me at the desk. People also often had questions about the identification of flowers and/or animals that they had seen out on the mountain or wanted to know where they could go for a hike.

Occasionally, people who approached me at the desk did not have questions at all, but seemed to want to express their own perspectives about the lodge and Mount Hood. Quite a number of people who I talked to had known people who had helped build the lodge or who had experiences of the lodge during different periods of its history and simply wanted to share these experiences with someone who might be interested. Others would express how impressed or awe-inspired they were by the place. I often found these to be

meaningful exchanges in which both sides (me as "the Forest Service" and visitors as "the public") could talk, listen, and learn. In other words, sometimes curiosity manifested itself initially in expressions rather than questions and these expressions, when taken seriously, led to meaningful dialogue. While most of what I am focusing on here highlights curiosities of the public, it also seems important, in understanding how to pursue conservation education, that the Forest Service maintain and demonstrate *curiosity*.

Some Things that People Claim to be Curious About

I formally asked about half of the group of visitors and residents that I interviewed specifically about whether there was anything that they wanted to learn more about Mount Hood National Forest. Some people expressed ideas of their own accord without being asked. The ideas that were expressed are listed in Table 7.

Table 7. Curiosities About Mount Hood National Forest by Some Winter Visitors and Residents of Government Camp. The ideas listed were given by interviewees in response to the question "Is there anything that you would like to learn more about Mount Hood National Forest?" or of their own accord.

- Biology
- Development plans
- The environment and its inhabitants
- How to rent fire towers
- Impacts of development on wilderness areas
- Nothing
- More public awareness of recreation activities
- Public education regarding fees
- Specific places
- Volunteer opportunities

Some of the interests that participants expressed were apparently interests of their own, while some interests that were expressed referred to more generally to "the public" and it was less clear whether or not these people included themselves in their ideas of "the public." Some responses seemed not to be extensively thought out (quite understandable

given the context of my short interviews with them) and responses were sometimes used to reinforce other points that people were trying to make before I asked that particular question about their interests. For example, a few people who had previously expressed concerns about development on the forest used the opportunity of my question about their interests in learning more about the forest to further emphasize that they wanted to know about development plans before they were enacted. If we had been talking about something else previously, perhaps their answers would have been different, though this certainly doesn't make their responses invalid. A number of people mentioned specific places that they would like to learn more about in response to this question.

Potentially Better Ways to Determine What People are Curious About

If I were to do the interviews again and want to learn something more about what people are truly curious about, I would probably change the ways that I approached this topic. This question might actually be meaningfully approached through the use of more quantitative methods, where various subjects could be listed and then rated according to interest level. These subjects might be ideas that the Forest Service feels prepared to engage through Conservation education and these subjects might also be established through informal dialogue with a fair cross-section of the public and experienced "front-line" Forest Service employees who have a lot of interaction with some members of "the public." This dialogue should certainly include volunteers who often have a wealth of experience in both formal and informal public interactions. It should also be sure to include dialogue with less represented parts of the public including local immigrant communities.

People Do Seem to Want to Learn More About Mount Hood National Forest

In response to a question that I asked about ways that participants thought that the Forest Service (as the major public land manager on Mount Hood National Forest) should interact with the public concerning the forest, a number of visitors responded that public education ("more like the park service") should be a priority. A middle-aged woman from Portland who I interviewed at Trillium Lake, said that she hadn't dealt much with the Forest

Service on Mount Hood National Forest, other than stopping in at the visitor center now and then, but that she conceived of Forest Service employees as "ambassadors of the land" and she wished that she had more contact with them. She talked about experiences in other places (at National Parks as well as other National Forests) where she had attended nature walks led by "rangers" and she saw this as a very important part of public land experiences. Other visitors expressed interest in learning more about opportunities to volunteer on the forest and many visitors and residents thought that there should be a better "public forum" for learning about what was happening on Mount Hood National Forest.

Perceptions of Mount Hood National Forest

The ways that people perceive Mount Hood National Forest are important for the Forest Service to understand in order to better design and implement conservation education on the forest. In relation to some of the theory discussed in Chapters Three and Four ("The Public and Public Lands" and "Nature and Subjectivity"), different "publics" are likely to perceive and conceive of Mount Hood National Forests in different ways. My own research does not adequately represent a diversity of "publics" (and their perceptions) since I was only able to contact and communicate with a small number of visitors through interviews and cognitive mapping. My research does, however, begin to approach this question of people's perceptions of the forest and if nothing else, highlights some different ways that people conceive of the forest that might be useful considerations in conservation education planning. More research really needs to be done regarding multi-ethnic perceptions of public lands and specific forests such as Mount Hood in particular. My own representations of people's perceptions of Mount Hood National Forest are based on a question that I asked to some participating visitors and local residents about what they thought of as the most important characteristic of Mount Hood National Forest as well as cognitive mapping exercises that I did with almost all of my participants.

Perceiving, Conceptualizing and Representing Mount Hood National Forest

While I cannot know for sure how my research participants perceive Mount Hood National Forest, I was able to begin to get at somewhat of a sense of how they conceptualize the forest through representations that they made in answering questions and participating in cognitive mapping exercises. In Table 8 are listed the responses that I received with seven different visitors and local residents when I asked what they thought of as the most important characteristic of Mount Hood National Forest.

Table 8. Conceptions of Mount Hood National Forest by Seven Winter Forest Visitors and Government Camp Residents. The ideas listed were given by interviewees in response to the question "What do you see as the most important characteristic of Mount Hood National Forest?"

What do you see as the most important characteristic of Mount Hood National Forest?
• It pulls me further from technology and closer to nature.
• It refreshes my spirit.
• It's still wild - it feels wild.
• It feels secluded, yet it's not too far from lots of people.
• Mount Hood.
• Mount Hood, of course.
• It's beauty, I guess, if you're attracted to mountains.

While this question that I asked to a small number of people only began to approach how people conceptualize Mount Hood National Forest, most of the responses refer to recreational values with the exception of the response of "Mount Hood" as a most important characteristic, where recreational value is not necessarily *explicitly* expressed.

Conceptualizations Through Cognitive Mapping

Through the cognitive mapping exercises that I carried out with about 14 forest visitors and local residents on Mount Hood National Forest, the question of people's perceptions of the forest were approached in a more spatial way. I was initially curious as to whether or not there would be any significant differences between different forest visitors as well as between how forest visitors, local residents and Forest Service employees would represent the forest spatially in terms of different categories that I would ask them to indicate on the maps. As discussed in Chapter Five ("Representation in Research"), I found there to be too many factors influencing mapping that were obscured in the "completed" maps and I decided not to use them in that form in presenting my research. I was also unable to do the mapping exercise with enough Forest Service employees within the time frame of my research since I did not learn about this technique until after I had already completed my interviews with them.

Relating to conceptualizations of the forest, on map templates I had research participants indicate:

1. Places that they like to go on the forest
2. Areas that are most important to their ideas of Mount Hood National Forest
3. Areas that they consider to be wilderness (not necessarily according to formal definitions of wilderness)
4. Areas that they consider best for recreation
5. Areas that they consider best for resource extraction
6. Good places to learn about nature
7. Places that they think of as very important to take very good care of
8. Anything that needed to be added to the map in order to make it best represent how they thought about the forest

In the development of the categories that I used with visitors on the maps, I also had some people indicate areas that they thought of as "scenic," "calming," "spoiled," "stressful," "good places to go with friends," "good places to go with family," and "good places to spend a day" (see footnote 23).

Not surprisingly, most of the places that people marked were concentrated within the Highway 26 corridor and north through Mount Hood to the Columbia River (almost all of my research interactions took place within the Highway 26 corridor) (see Appendix A for

a map). Exceptions to this rule were seen in less than half of the of the maps. In these cases, the categories that people marked outside of the highway 26 corridor were mostly areas that they considered to be wilderness, areas that they thought of as very important to take care of and places that they thought of as good to learn about nature[23]. Even people who expressed a leeriness about my asking them to indicate areas that they thought best for resource extraction, yet who proceeded to do so, did not attempt to indicate areas that were far outside of the general areas that they considered best for recreation or areas that they considered to be wilderness. Spatial conceptualizations of the forest simply did not seem to extend far beyond areas that they had been to.

Pertaining to people's perceptions of Mount Hood National Forest, a most interesting and unexpected response that I received to category number 8, was that a number of participants drew pictures of trees (or indicated that they would like to draw pictures of trees and/or animals, topography and ecosystem types) on the map in order to make it better represent how they perceive and think about the forest. They did not seem to mean this completely in a spatial sense, such as where trees or animals could be located spatially on the map. Also, in order for the map to best represent the ways that they were thinking about the forest, *images* came into their mind that could be used. One woman explained her desire to draw trees and animals on the map, "if she could draw better," as "you know, like the trees, critters and boggy areas that you see represented on some old Japanese maps." The most poignant ways that people conceive of Mount Hood National Forest are not necessarily spatial (at least not in a map-sense).

Through the cognitive mapping that I did with visitors and residents, there was a high correspondence between places that people indicated that they like to go on the forest and places that they conceive of in *any* of the ways that I asked them to represent - in terms of wilderness and recreation as well as resource extraction. In a few cases, however, people did notice the lightly indicated "official" forest boundary on the map template that I provided and they circled the entire outline of the National Forest to indicate such categories

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[23] It should be noted that my design for the cognitive mapping portion of my research evolved through the process of implementation and discussing my project with others. Categories 1,3,6, and 7 were used with all participants, but categories 2,4,5,and 8 were only used in the second half of the maps that were created (for these first maps, other categories, such as listed above, were used).

as "places that you think of as very important to take very good care of" and "good places to learn about nature."

When questioned further about why people marked specific places that they did as "good places to learn about nature," a common response was that these places were easily accessible. Sometimes people emphasized the idea that *all* places on the forest are good places to learn about nature, that it is just a matter of actually going there and spending time.

Discussion

People's perceptions of Mount Hood National Forest are complex and not necessarily easily studied and/or represented. The strongest idea that my limited research supported is an idea that people conceive of places in terms of what they directly experience. This meant that for most of my participants, representations of Mount Hood National Forest were centered around Mount Hood and the Highway 26 corridor. It would be interesting to do cognitive mapping with visitors and residents in other parts of the forest, for example the highly underrepresented (in my research) southern half of the forest, in order to see how such representations might differ. It would also be interesting to think of other multi-modal ways to allow visitors to represent ways in which they conceive of the forest since through both words and maps, there are various limitations. People do not experience the forest wholly, or primarily, through words and maps (although words and maps do take part in experiences).

People's perceptions of Mount Hood National Forest depend a lot on their experiences there. Conservation education efforts not only stand to learn from better understandings of people's perceptions, but they also play significant roles in those perceptions. Many forest visitors expressed positive experiences that they had on the forest as well as positive ideas that they had about the Forest Service in terms of conservation education experiences that they had had there.

Knowledge About Nature and Mount Hood National Forest

In order to best implement conservation education on Mount Hood National Forest, it is perhaps interesting to get a sense of what people already claim to know about the forest.

Additionally, what Forest Service employees claim to know is also important to such considerations. What conservation education messages are most appropriate for the Forest Service to be offering and do these messages match gaps in what many people claim to know already? These questions are raised mostly in a rhetorical way here since my own research is not extensive enough (nor does it represent enough diversity) to truly identify any potential gaps in "knowledge" or even what people truly might "know." In what follows, I represent visitor, local resident, and Forest Service self-representations of their knowledge of nature and Mount Hood National Forest.

Different people claimed different types and degrees of knowledge about nature and Mount Hood National Forest. These, of course, were only self-representations of knowledge without "knowledge" always being defined in any particular way. These representations probably reflect people's personalities and egos as well as their perceptions. Visitors were explicitly asked what they "knew" about Mount Hood National Forest. In cognitive mapping with forest visitors and local residents, these participants were also asked to indicate areas on map templates that they felt that they knew a lot about. In the 1999 conservation education report, it is explicitly stated that in order to determine messages that Forest Service programs should give to the public, areas where public knowledge is lacking should be identified (CEFS 1999, p. 45).

Claims to Knowledge by the Public

Visitors and local residents were asked what they felt that they "knew" about Mount Hood National Forest and how they learned it. The responses that I recorded are listed in Table 9.

Table 9. Self-representations of Knowledge of Mount Hood National Forest by 14 Forest Visitors and Local Residents. The ideas listed were given by interviewees in response to a question asking what they felt that they knew about Mount Hood National Forest and how they learned it. The idea of "knowledge" was sometimes qualified in terms of 'what you know well enough to potentially teach others something about.'

What do you feel like you "know" about Mount Hood National Forest?

- Backpacking
- Camping
- Fishing
- Hunting is allowed in wilderness (to her surprise)
- It is managed for "multiple uses"
- It's been a National Forest for a long time
- It's big
- Maybe doesn't know that much about it
- Mount Hood is supposed to erupt
- Ski areas are within the National Forest Boundaries
- Ski runs and back roads
- The Forest Service spends a lot on studies and he never sees the results
- The mountain
- There are concessionaires in places such as at Timberline Lodge and for camping
- There's a lot of poor forest management there (referring to growth of underbrush)
- They're trying to put a resort on the other side of the mountain
- Timberline Trail
- Topography (extremely well)
- The forest is under jurisdiction of the USFS
- Vegetation, wildlife and amphibians
- Winter Camping

How did you learn this?

- Books
- Grew up in area
- Had worked at Timberline Lodge
- Hikes a lot
- Husband is a hunter
- Portland newspaper
- Ranger stations
- Reads everything she can find about mountains
- She and her husband are wildlife biologists
- Through co-workers (works on the mountain)

As in the case of other questions that I asked, some of the responses given seemed somewhat random and more related to ongoing dialogue and narrative of specific interviews than related to deeply deliberated answers to the question that I asked. Much of this certainly relates to the very vague nature of the question as I asked it. In order to get better answers, a more specific question or questions would have to be designed. What I *was* able to glean through asking the vague question that I did, was that when the question was left open to interpretation, people interpreted "knowledge" in a number of different ways. Some of these ways involved interpretations of "knowledge" as knowledge of skills, activities, land management by the Forest Service, personal experiences, geology, ecology, topography, and/or current events. It was also somewhat interesting that only one of my participants answered that a ranger station was the place that she learned what she felt that she "knew" about the forest. Through the cognitive mapping that I did, places that people indicated knowing a lot about were always the same places that people indicated having spent a lot of time.

There were differences in degrees of knowledge that people expressed having about Mount Hood National Forest and again, a lot seemed to depend on how interviewees were conceptualizing "knowledge." Referring to the Forest Service, one interviewee implied that he thought that the Forest Service knew best how to manage the land since "they're the professionals here, I'm just a user." Some others agreed with this general sentiment, putting a lot of trust in the "knowledge" of the Forest Service to do what is "right" for the land, but others were more skeptical. A few interviewees emphasized that they thought that the Forest Service must have a very difficult time deciding how to manage the land since there were so many conflicting uses of the land and since nature/ecosystems will never be completely understood. More often than not, however, trust in the Forest Service seemed to be less connected to assessments of knowledge, per say than it was connected to prior experiences that people had had with the agency in various ways.

Claims to Knowledge by the Forest Service

In my interviews with Forest Service employees, I often asked if there were any important messages that they thought that the particular programs that they worked for within the agency had to share with the public. In Table 10 are some of the responses that I received within some of the different programs.

Table 10. Important Messages That Some People Working Within Various Forest Service Programs on the Zigzag Ranger District Feel That Their Program Has to Share with the Public. The ideas listed were given by interviewees in response to a question asking what they thought of as the most important message that their program has to share with the public. Those responses not in quotation marks have been paraphrased.

Archeology

"Make sure we preserve our nation's heritage...if we know archeologically where we've been, there's that old cliché that you never can go forward unless you know where you've been."

Fisheries

People's actions have effects and impacts on ecosystems

The identity of the Pacific Northwest is tied up with salmon. "Helping people to understand what salmon are, how they're integrated into the ecosystem, what the importance of salmon really are to society - economically, socially, ecologically."

Hydrology

Importance of clean water and how it affects a lot of things we do

Interpretation

These are special places (our public lands), we need to take care of them

Law Enforcement

Pick up trash

Recreation

LNT, what constitutes proper behavior, understanding why the regulations are there regarding sanitation, littering, tree damage, off road vehicle use

Silviculture

"Forest Health. Through "veg" management you can do what you can do to enhance the reduction of insect and disease."

Volunteers

Importance of individuals getting involved in areas that they already have opinions about in order to broaden their points of view

Wildlife Biology

Large predators play critical roles in ecosystems

Much like the general public, responses by Forest Service employees reflected individual experiences that they have of the forest through the nature of their jobs and general themes that ran through interviews. Some employees emphasized the fact that their response was their own personal idea and not necessarily reflective of how other people working in their program would respond.

In the 1999 conservation education report (CEFS 1999), the question "what should the main themes be in educating the public?" is answered by the Forest Service at a national level. The answer is part of the product of the conservation education task force having conducted 24 "listening sessions" around the country with Forest Service employees and representatives of other federal and state agencies, non-profit organizations and educators. In response to this question, two themes were identified by participants as main themes that the Forest Service should have in educating the public. These themes were, "sustainability of natural and cultural resources in forest, grassland and aquatic ecosystems; and awareness and understanding of interrelationships in natural systems and between people and the land" (CEFS 1999, p. 11). These "national" Forest Service conservation education themes were never mentioned in my interviews with Forest Service employees.

None of the messages that were listed as important by employees at the district-level of Mount Hood National Forest are unrelated to the main themes that are described in the 1999 report. Given the significance of the concept of *place* as a context and perspective which is recognized as having meaning for people, perhaps it is very important that national directives be incorporated into action "on the ground" through place-based consideration; that is, by asking what specific, place-experienced Forest Service employees[24] find to be the most important messages, as well as what diverse publics are interested in learning more about. By then considering all of this in relation to national themes, more cohesive and meaningful conservation education might emerge. Trouble is, this seems to demand

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[24] The Zigzag Ranger District of Mount Hood National Forest has a wealth of "place-experienced" employees. Of the messages by different people in different programs listed in table 6.8, eight different employees perspectives were incorporated. While those eight employees ranged in time that they have worked on Mount Hood National Forest from 1-32 years, the average time among them (of having worked specifically on Mount Hood National Forest) was 16.75 years. Through our interviews, many employees talked about how it was unusual within the Forest Service to stay in one place so long, but that they really liked where they were and had done all they could to stay there. Even though they claimed that it may not have been best for their career with the agency to stay in one place for so long, they did. Many of these employees mentioned that they would likely retire there.

extensive communication. Extensive communication or dialogue seems to demand a lot of time (which almost all employees expressed a significant lack of).

On Mount Hood National Forest there is the Forest Leadership Team (FLT) and the recently crafted Community Action Team (CAT) which have forums for discussing such issues to a certain degree since they pull people together for that necessary communication. These forums include only a select few Forest Service employees, however, and for this structure to work, there seems to need to be effective communication at other levels as well. For example, I was not able to find evidence of any formal means of communication between "front-liners" (e.g. people who represent the Forest Service and have direct contact with the public such as at the Mount Hood Information Center) and administrators who make decisions about conservation education. Nor did I find evidence of formal means of communication between front-liners and other Forest Service Employees who have direct contact with the "resources" that the front-liners are telling the public about. In my interviews, this manifested itself a few times in the form of frustration by Forest Service employees that Visitor Center employees were giving out inaccurate information or generally did not understand what was happening on the forest.

> The problem with front-liners is that they don't necessarily have the information that people want…because they don't know what's going on because they're at the info center….We should probably have more contact with the info center than we do. Sometimes we hear from them that we haven't let them know what's goin' on. I say that's because you didn't call. I don't necessarily have time to go down there and wait around for someone to ask a question about [my program]. The people down there should really be jacks of all trades, but you can't really get that if you're workin' at the visitor center.

Another idea to address within the subject of "Forest Service claims to knowledge" is the diverse ways in which Forest Service employees conceived of the role of the Forest Service as an agency. Most of my Forest Service interviewees represented the role of the Forest Service as in dialogue with the public with public values as being important to management (both existing values and through the potential of conservation education to positively influence public values). Two, maybe three of the employees that I interviewed, however, conceived of (represented) the Forest Service in terms of always knowing what is

best for management of the land (through science) in the face of a basically ignorant public. An example of this latter view can be seen in the following passage taken from part of my interview where I was asking about what he thought the Forest Service could learn from the public with regard to conservation education.

> Adrianna: *What should we try to learn from the public regarding conservation education?*
>
> Forest Service employee: I think we should be listening to the public, but not always try to make the public happy. Cause there's some things....if there's a science-driven thing to do and we've got the data to back it up, then we should do that....even if it makes some people upset.
>
> Adrianna: *Even if science changes over time too?*
>
> Forest Service employee: Well sure.
>
> Adrianna: *...and you get people upset and that causes litigation....*
>
> Forest Service employee: Yeah, I mean, just because this is the people's National Forest doesn't mean that we should do what everybody thinks that we should do because if we do we'll never make everybody happy. We'll always be goin' against somebody. So the direction we should take...we should always have the view of the public in mind, and make decisions accordingly, but if science says that that's a bad one then I don't think that we should make that decision. It's like the use of fire retardant. Fire retardant used at the right time and the right place will stop a fire. And just because a handful of people say you shouldn't be usin' that retardant because it's got arsenic in it, if I can stop a fire....
>
> Adrianna: *What about the argument that fire is a natural part of ecosystems?*
>
> Forest Service employee: Fire is, but fire is not necessarily wanted.

As well as demonstrating a not uncommon (but also certainly not universal) view within the Forest Service regarding a confidence in science and the Forest Service as managers of the land, this passage seems to reveal something about a connection between science's so-called "facts" and the values of those who "use" it.

Discussion

What Forest Service employees claim to "know" as well as what various publics claim to "know" about Mount Hood National Forest need to be considered in the development of conservation education. This is a way to approach conservation education efforts through the specific context of a specific place in order for meaningful conservation education to emerge. As with so many other things, this seems to rely heavily on increased communication. Improved communication within the Forest Service, to begin with, it seems, could improve communication between the Forest Service and "the public."

Experiences of Mount Hood National Forest

Memory inhabits external things as much as the internal regions of the human psyche.
-Robert Harrison (1992, p. 186)

People have and seek widely different experiences on Mount Hood National Forest. This can be seen even in the above list of reasons (Table 3) for coming to the forest that was generated through a very small (and not even all that diverse) sample of winter visitors. Additionally, I asked almost everyone that I interviewed to name their most memorable experience on the forest. For Forest Service employees, I qualified this as a most memorable experience *working* on Mount Hood National Forest. Understanding something about what makes meaningful and memorable experiences on public lands can be very useful to conservation education planning efforts.

Memorable Experiences

I have included all of the responses that I received to my question about most memorable experiences on Mount Hood National Forest in Table 11, organized according to various groups asked. In the table I have paraphrased many of the longer answers while some quotes have been taken directly. Conservation education can be informed through an

awareness of experiences that are meaningful to people on the forest. Conservation education also plays a role in crafting people's experiences on National Forests.

Table 11. Most Memorable Experiences on Mount Hood National Forest. The experiences listed are mostly paraphrased responses that I received to the questions "What is a most memorable experience that you have had on Mount Hood National Forest?" (for visitors and local residents) and "What is a most memorable experience that you've had working on Mount Hood National Forest?" (for Forest Service employees).

Visitors
• Meeting a bear eating berries on the east side of the mountain in an open glade • Camping at lower Eagle Creek with people I cared a lot about at the time • The day my car broke down along Clear Creek, my son was sick and I fell down a hill • Spending time with friends at Bagby Hot Springs • Building first snow cave at Trillium Lake • Coordinating a Special Olympics event at Mount Hood Meadows • First backpacking trip with son near Timothy Lake • Finding an elk carcass during an owl survey that I was conducting • Almost breaking my back in a Timberline snowboarding competition • Watching the sun rise from the Palmer snowfield during a climb of Mount Hood back when I was in high school • Helping take care of horses at Multorpor when I was a kid
Residents of Government Camp
• Getting married at Timberline Lodge • Alpenglow at Paradise Park • Finding a patch of unusual flowers at about 7,500 feet (elev.) on the mountain • Sitting at the base of Reid glacier at Yocum Ridge • First Climb of Mount Hood (which was a very difficult route)
Forest Service Employees – Headquarters
• Bloomenauer's and Walden's Recreation "Summit" up at Mount Hood • Unexpectedly coming across a remote waterfall during a stream survey • Hiking out to Ramona Falls with some Zigzag employees • Working right now on trying to develop a "recreation community of interest" for Mount Hood National Forest
Forest Service Employees – Zigzag
• Sleeping under the stars at Paradise Park while out doing trail maintenance • Leading programs for Elderhostel groups and campfire programs • Doing watershed analyses

...Table 11 continued ("Forest Service Employees – Zigzag")...

- "I've had so much fun, I couldn't even begin to tell you...I just love it when you're out with a crew and having fun."
- Planting trees, inspecting trees, going to the nursery, climbing trees
- The first time I got to go in the Bull Run[25]
- Getting the Trillium amphitheatre (memorial) built – a three year project done in three months (unusual for the Forest Service)
- Writing a historic building preservation plan for Timberline Lodge
- Working with groups and individuals that have a long history with the forest
- The recent helicopter crash on Mount Hood
- My first arrest with bear grass pickers
- Eating lunch up at Timberline Lodge one day during my first winter and looking out the window at the snow, realizing that what I do here on the Forest is unique

Forest Service Employees – Other Ranger Districts

- Getting to know employees and getting to know where there heart is in getting a job done
- Dealing with the well known and contentious Eagle Creek timber sale
- Working collaboratively with different Forest Service programs, commercial outfitter guides and the general public on a river management document that took three years and was very difficult, but in the end very successful from the perspective of all parties involved
- Dealing with a visitor in a campsite who was certain a nearby tree was going to fall on him during the night and wanted someone to remove it
- Working on a series of field trips with environmental advocacy groups and ski area managers, "trying to get on the ground and just talk about issues"

Learning about what people deem to be memorable experiences that they have had on specific public lands might be one way to begin to approach ways that such places are meaningful to people. Galliano and Loeffler (1992, p. 2), note memory as one of four important elements of "place" (Galliano and Loeffler 1999, p. 2). What I particularly noticed in my interviews with Forest Service employees was that as soon as I asked this question, the tone of the interview almost always changed significantly. Interviewees seemed to relax a lot and often they smiled while recounting narrative that was much freer than previous responses had been. Some people did have trouble thinking about what a *single* most memorable experience would be, but everyone came up with something in the end and

[25] The Bull Run watershed is generally off-limits to the general public to protect Portland's water supply.

often detailed stories emerged. One of the responses that I found most interesting was by an employee of 16 years on the Zigzag district who really highlighted this aspect of the forest as a *place* in her response.

> *What has been a most memorable experience for you working on Mount Hood National Forest?*
> It really varies from day to day, from year to year, but it probably winds up being when I wind up working with.....there's a lot of the public that has a long history with the forest. Like a lot of folks with the Pacific Crest Trail Association or Oregon Equestrian Trails or Mazamas, or whatever group has a long history with the forest. It's just kind of fun when management has turned over and we're still here and working on the same issues and a new manager comes in, it's just kind of comical. I really appreciate working with those folks 'cause they're here and they're staying here. I'm here and I'm staying here. Management comes and goes and changes their agenda. But we're here, we're still stewarding the land. Having that consistency with folks that are around even though I might not agree with all of them,... [gives example and grumbles]...but you know, we're still here, and so for me, I know I'm gonna stay here, I'm gonna retire here and however much managers think that's a bad thing because you become too close to the community, I'm stewarding the land. That's what I do. And I know the land that I take care of pretty well and so when someone says 'you know that third switchback up where the dogs are goin off of the cliff?' and I know where they're talkin' about or when someone says 'you know that old burn on the backside of Still Creek where...', and I know where they're talkin' about. And that's a real human tradition/cultural thing and it isn't just a Forest Service thing. That's where you're really part of the community with that.

Experiences in Relation to Conservation Education

The relationship of different ways that people experience Mount Hood National Forest to conservation education is a multi-faceted one. An understanding of types of experiences that are meaningful to visitors to the forest can be very valuable to conservation education planning efforts so that conservation messages can be given within meaningful contexts. Conservation education creates experiences on the forest...which may or may not be memorable ones. Additionally, conservation education itself might be conceived to be a way of influencing experiences on the forest. For example, after having led a forest hike while I was an environmental interpreter at Yosemite National Park, I remember one urban visitor coming up to me afterwards to ask me more about trees, remarking that she had no

idea that trees were so interesting (in fact, she had thought that they were really boring) until that walk.

In order to figure out what some meaningful experiences on the forest are, I found the type of question that I asked here to elicit much richer responses than I probably would have elicited if I had simply asked people what they thought to be important types of experiences on the forest (more along the lines of some of the other more general questions that I asked). While many reported experiences were very specific and often non-repeatable (part of what may have made the experiences so special), the responses could also be analyzed in terms of their particular qualities that may contribute to making those experiences unique. Some of the qualities that might be pulled out of the lists above are the following included in Table 12.

Table 12. Qualities of Most Memorable Experiences on Mount Hood National Forest. These 6 qualities were drawn from the list of most memorable experiences found in Table 11. The experiences listed in Table 11 each exhibit one or more of these 6 qualities.

- Seeing wildlife in natural ecosystems
- Spending time with people one cares about
- Being actively involved and engaged with the forest or activities on the forest
- Doing something for the first time
- Spending time in places that one considers beautiful
- Doing something really exciting

A question that often arises in public land management in general, and especially on National Forests, is what sorts of experiences those lands should be managed for. Oftentimes the most vocal public constituencies, such as organized snowmobile or hiking groups, are the voices that are heard by the Forest Service. What about the experiences behind the voices that are not heard, such as those of multi-ethnic populations or other diverse "publics" who may have their own unique conceptualizations of Mount Hood National Forest? Increased dialogue on Mount Hood National Forest between its Forest Service and its diverse publics might help diverse experiences to be acknowledged. Through thoughtful planning, meaningful qualities of those experiences might be drawn out and then

drawn upon not only in conservation education efforts, but also in land management efforts in general. Various forest activities might, for example, fulfill the experiential quality of "doing something really exciting" while there might be fewer activities that fulfill the valued experiential quality of "seeing wildlife in natural ecosystems." For conservation education on Mount Hood National Forest, this might mean that more qualitative research into what makes meaningful experiences on the forest (for its diverse publics) might lead to better conservation education there. Such understanding could also inform and help direct current efforts to make conservation education efforts more cohesive.

Teaching

Conservation education generally involves "teaching," in some form or other, about natural systems and/or "conservation" of natural systems. According to the 1999 conservation education report, "a guiding principle of conservation education in the Forest Service is to teach people how to think, not what to think, about the natural and cultural environment" (CEFS 1999, p. 3)). The report goes on to give its vision statement as the following:

> The Forest Service conservation education program will be an effective, dynamic means for the Forest Service to connect the American people with their environment. The Forest Service will provide the tools Americans need to participate effectively in the critical task of sustaining our Nation's natural and cultural resources. This undertaking will be a coordinated, servicewide effort that will affect all aspects of the agency's operations (CEFS 1999, p. 45).

Through the stated "guiding principle" and "mission statement," there is an emphasis on "teaching" about relationships between people and the land and a teaching of *how* to think about natural and cultural environments. While this sounds very neat and nice, one might ask if there is really a strong distinction between *how* one thinks and *what* one thinks. In fact, in the same section of the report that gives the vision statement for conservation education by the Forest Service, there is a subsection entitled "Messages" in which it is written that "a set of national conservation education focuses will be developed based on identification of areas where public knowledge is lacking" (CEFS 1999, p. 45). As

already established in the sub-chapter on "Knowledge" and discussed more theoretically in Chapter Four ("Nature and Subjectivity"), "knowledge" can be interpreted in various ways and mean various things. Cultural anthropologist Alf Hornborg refers to knowledge as "a *relationship* with nature that is constitutive both of the knower and the known" (Hornborg 1996, p. 55, emphasis original). The 1999 conservation education report is not explicit about what it means when it refers to knowledge. This is something that might need to be worked out more on the local level of individual forests such as Mount Hood. What is it that Mount Hood National Forest can and should "teach" the public?

As discussed earlier in this chapter, explorations into what the Forest Service feels that it is in a position to offer the public as well as what it seems that the public is in a position to be receptive to are both important to be considered together along with any particular "knowledge gaps" that might be identified within various publics. Motivations, curiosity, and perceptions all play into this. Interestingly, these various aspects involved with "teaching" were also identified by Forest Service employees when I asked what they thought that conservation education is. As noted in table 2, knowledge, emotions, awareness, values, relevance, relationships, messages and the Forest Service itself were 8 different categories by which conservation education was conceptualized in responses.

While teaching is often conceptualized in terms of what one party might impart to another in terms of a transmission of information, teaching might more valuably be considered in terms of interaction or dialogue between parties in which relationships are established and any "transmission" of information or ideas is not solely unidirectional. This different conceptualization of teaching is particularly pertinent to conservation education in which a professed "ultimate measure of success" is "an informed and engaged citizenry able to participate effectively in the actions and decisions needed to sustain the values of our natural resources for present and future generations" (CEFS 1999, p. 5).

Rather than focusing on ways that the Forest Service will "teach" the public through conservation education, a more useful conceptualization might be for the Forest Service to consider how it might best "engage" with the public. This is where considerations of motivations, curiosity, perceptions and "knowledge" of both the public and the Forest Service should be considered, and considered together.

Learning

Learning is a crucial part of teaching, especially when teaching is considered in terms of "engagement" such as discussed above. In Table 7, I have listed some "curiosities" that some interviewees professed to have when asked what they would like to learn more about Mount Hood National Forest. Through my research I also asked visitors and local residents, through cognitive mapping, to indicate places that they would like to learn more about on map templates of the Mount Hood National Forest area. To begin to address the other "side" of learning involved with conservation education, I also asked Forest Service employees what they thought that the Forest Service should be trying to learn from the public with regard to conservation education. I also asked forest visitors and local residents what they would most like to see in the Forest Service as an agency and/or any messages that they would like to pass on to the Forest Service.

Places That People Would Like to Learn More About

Through cognitive mapping, a couple of participants indicated that they would like to learn more about the whole forest, including places that they had never been to. The majority of participants, however, indicated that they would like to learn more about areas that encompassed more specific places where they had already indicated having been to. This was discussed previously as perhaps having to do with different conceptualizations of the extent of the forest.

What the Forest Service Thinks That it Should Learn from the Public

Through my interviews with Forest Service employees, I tried to get a sense of what Forest Service employees thought that the agency should be trying to learn from the public with regard to conservation education. The answers that I received are recorded in Table 13.

Table 13. What interviewed Forest Service Employees Think That the Forest Service Should Try to Learn From the Public with Regard to Conservation Education. Responses received during interviews with Forest Service employees when they were asked if they thought that there is anything that the Forest Service should try to learn from the public. Some responses were paraphrased.

Is there anything you think that the Forest Service should try to learn from the public regarding conservation education?

- "Everything. Always. It's their land."
- "I think we need to constantly do a better job of communicating, of interacting with the public."
- "Maybe not the Joe Blow public, but maybe from the private sector…they do the best job at advertising."
- "Some people have such a touch with the land and a lot of times I think that it's really good for the federal agencies to be listening to [them]" (e.g. landowners)
- "There's a *huge* amount that we could learn from them, if we'd take the time…a lot of the public has experiences that we really learn from" (e.g. various degrees and involvement in partnerships)
- "We need to do a better job of listening…there's a lot the public can teach us"
- "We need to figure out what their values are and approach it from their value set because they're gonna ignore our value set."
- "We should be listening to the public, but not always try to make the public happy"
- "We should be talking to them and listening to them."
- Do current interpretive materials "work" for them?
- Gaps in their education
- How can we reach more people
- How we can get messages through to more challenging visitors
- How we can inspire them
- How we should best get our message out.
- Their interests
- Their needs (more important than just wants)
- What are subjects that we're not talking about that they want to hear about
- What people use the forest for
- What they are interested in
- What they feel or sense is important
- What they want from National Forests ("you have to consider that most people are coming from cities and are not living out here")
- What they would like to learn more about
- What they would participate in
- What they're interested in
- Where they're coming from ("and that they're going to come from as many different directions as we have")

Curiously enough, responses by Forest Service employees often emphasized a certain dialogic nature of conservation education between the Forest Service and the public. Sometimes this was done by emphasizing a need for the improvement of communication, even though this was not a direct answer to my question.

What the Public Would Like the Forest Service to Learn

A number of questions were asked to forest visitors and local residents regarding their thoughts about land management, the Forest Service and the future of Mount Hood National Forest. I received the responses listed in Table 14.

Table 14. Responses by Forest Visitors and Local Residents to Various Questions About Land Management, the Forest Service and the Future of Mount Hood National Forest. The responses listed for each of the four questions have been paraphrased such as I recorded responses in my notes during interviews. Not all participants answered (or were asked) all questions, but all responses are recorded in this table.

What do you think should be the most important management objectives for this land?

- I know there's not enough people [working for the Forest Service], but they're not paying enough attention to the forest. Thieves steal beargrass, there's not enough replanting of trees, and some trails need upkeep.
- Leave it the way you find it.
- Mount Hood is so close to the city. We should balance recreation uses with the things that draw us here (balance use and preservation).
- Recreational and then for productivity. It should be paying for itself. There should be more logging, done wisely. It should be thought of as a crop. And there are places where it shouldn't be logged.
- To maintain it as a genuine wilderness area.
- To preserve it for future generations

(Continued on next two pages)

...Table 14 continued...

What ways do you think that the Forest Service (as the major public land manager here) should interact with the public concerning the forest? Does this happen?

- I don't know.
- I haven't dealt much with the Forest Service. I've stopped in at ranger stations some and I've done some programs. The Forest Service needs to be the ambassador of the land. Park Service people bring respect to places. This happens somewhat with the Forest Service, but it should be a priority.
- It's hard to criticize them too much because they don't have enough people. When I first moved here (1946) there used to be more interaction between the Forest Service and local residents.
- Somehow they need to have a forum so that people who live here and people who use the forest can interact and tell their ideas (not just businesses). This is all just pie in the sky and it's not gonna happen, but it's nice that you ask.
- The public is losing more and more say. There should be a public forum. There should be more nature walks and things like that. This has happened more in past years. I'm worried about the current administration.
- They should be doing things rather than just driving up and down the road, one person to a vehicle. They should be supervising cleaning up, getting the public to help them on clearing trails. This seldom happens.

Is there anything you'd like to share with the Forest Service?

- Again, the hardest thing they do, preservation, has to be the key.
- Build more fire towers so we can stay in them.
- DOT needs to do something to Highway 26 up to "Meadows" to allow more people to come up here.
- Mount Hood National Forest is managed as well as any place I know of. They do a pretty good job.
- National Forest people are *guardians*.
- The Forest Service has been pretty good. Littering is a problem up here on the mountain, but otherwise...[noted that he has carried out bags of garbage]
- They do a pretty good job. I'm glad they're tough on rules to keep the mountain nice. I don't really mind the permit [Northwest Forest Pass].

...Table 14 continued...
What would you most like to see in the future of Mount Hood National Forest?

- I would hate to see a lot of change. Some development in Government Camp might not be a bad thing...controlled development...as long as I can still find a wild place. I'm glad they've stalled the planned development at "Meadows." I've seen pictures of other places like Aspen, Colorado where development has really ruined a place.
- I'd like to see it cleaned up. I don't trust the Forest Service.
- Many things: that the Zigzag Ranger District get their act together, that it's not overpopulated with hikers and people, that they preserve it, that it's the same in 100 years as it is today, if not better.
- Mount Hood staying prestigious [?]. Just the beauty, really. The freedom.
- Not to have it change too much...and it hasn't when you look at Sandy compared with Government Camp. I like that it's still wild and feels secluded yet it's not far from lots of people.
- Protection. And no further development on higher slopes of the mountain.

Responses to my questions, though they are few and cannot claim to be representative, do reveal some diversity (and conflict) with relation to what some members of the public consider to be important management objectives for the land. At the same time, there seems to be consensus that the Forest Service should involve itself more with the public. The most common complaint that I heard about the Forest Service regarded a lack of communication between the Forest Service and various individuals when they tried to do what they represented as 'taking a role in the stewardship of the land.' A number of interviewees mentioned writing letters or calling the Forest Service about issues of concern to them and never receiving any response which they said left them feeling a certain mistrust for the Forest Service.

Communication

Throughout this chapter, as well as the preceding chapters of this thesis, the subject of communication has repeatedly reemerged. Through my interviews, participant observation and personal experiences on Mount Hood National Forest, there were various

times when communication or dialogue stuck out as an issue that seemed to be integral to efficient implementation of conservation education as well as to developing and maintaining relationships between the Forest Service and the public.

Dialogue Within the Forest Service

In order for efficient conservation education to take place, within the forest there probably should be some consistency regarding messages and the work of the agency as a whole. As discussed previously regarding "claims to knowledge by the Forest Service," there was frustration expressed by some employees in relation to "front-liners" not giving out accurate information. In order to ameliorate that, dialogue between various programs and including the "front-liners" seems to be essential. Does that happen? A number of employees addressed this subject specifically in my interviews with them. I've included their ideas in Table 15.

Table 15. Perceived Opportunities for Discussion Between Programs Within the Forest Service. Examples of ideas that were expressed by four Forest Service employees (the only participants who addressed this subject with any sort of substantial detail) regarding opportunities for discussion between management programs on the forest. In parentheses, it is indicated how long each participant has worked on Mount Hood National Forest.

Perceived opportunities for "Discussion" within the Forest Service
• Meetings happen, but I'm not involved with them. I get a lot of info off the internet, but I know that it's not a good way for everybody. I also know that I don't know a whole lot of people on the forest so I don't know who to go to. Not that people aren't willing to answer questions and help...it's just not usually my first means of getting info. (district level seasonal employee, second season)
• People don't have the time to communicate so much, but it would be great if we had the time to let each other know what we're doing. (district level permanent employee, 16 years)
• Watershed analysis is a good opportunity for that...although that's probably starting to get a little stale. On an everyday level, it's pretty much project specific and funding specific...it's rare otherwise. (district level permanent employee, 24 years)
• (Clackamas district) I think that anytime anyone starts to do anything, people around here, they go and check. They go and say 'hey Joe, is this going to impact...' And we have our DLT (District Leadership Team) meetings where people talk pretty openly and a ranger who gets involved "on the ground" (district level permanent employee 13 years)

At the district level at Zigzag, it was a common sentiment that there were not really adequate opportunities for dialogue amongst employees. People were too busy and what dialogue there was, was based on specific projects with specific funding. There seemed to be even more isolation amidst seasonal employees, since they are not around all of the time to get to know as many people and generally they are not included in interdisciplinary meetings. This is likely, in part, due to the fact that they are not around for all that long each year and yet have a lot of work to accomplish within that time. Ironically, many of the "front-line" positions are not well funded and are often relied on to be filled by seasonal employees or even volunteers who are even less involved with within-agency dialogue.

Following is an example, expressed by one Zigzag permanent employee, of one sort of value that better interdisciplinary dialogue/involvement carries.

> I worked in timber and I'm not really a timber person at all, but I really learned a lot doing that 'cause now when I go to do stuff I have a better understanding of why they put this timber sale where they did or what the timber sale process is.

On the Clackamas, Barlow and Hood River ranger districts, I did not do nearly so many interviews as on the Zigzag, but on the Clackamas and Barlow, I talked to at least one person on each district who spoke of fruitful interdisciplinary dialogue that was occurring. From the extent of the interviews that I did, it is impossible to tell the extent to which that was really the case. If it were, a good reason for it might have to do with differences between the districts with regard to increased stresses on the Zigzag district due to accessibility from Portland and resulting increased visitation and exposure to scrutiny by urban populations. Management on the Zigzag district was likened by some to trying to manage "a whole forest in itself."

Dialogue Between the Forest Service and the Public

Various visitors to the forest and local residents, as mentioned previously, wished that they could have opportunities for better dialogue with the Forest Service. Some of these opinions are expressed in Table 14. From the perspective of the Forest Service, with regard to conservation education, employees of the agency also expressed a perceived

importance of hearing the public's point of view. To my question about whether or not there is anything that the Forest Service should be trying to learn from the public regarding conservation education, responses were pretty unanimous in agreeing that there are things that can and should be learned (Table 13). Responses were less in agreement with regard to actions that should be taken in response to what is learned from the public (Table 13).

Closing Remarks

In Table 16, key points about conservation education that were raised by participants in interviews and supported by yet other research participants, are listed. These key points are also supported by the research findings represented previously in this chapter.

Table 16. Key points About Conservation Education on Mount Hood National Forest. These points were raised by specific research participants in interviews and were further supported by yet other research participants.

Conservation Education Key Points
1. Many people are deeply invested in Mount Hood National Forest, from forest visitors and residents to Forest Service employees.
2. Increased meaningful interaction by the Forest Service with the public is needed and that might be partially accomplished through conservation education.
3. A Forest Service "presence" is important for maintaining a positive image of the Forest Service in the eyes of the public and for promoting a more engaged public in the stewardship of public lands.
4. Conservation education should be happening within the agency (between management disciplines) as well as by the agency for the public.
5. Current conservation education efforts, on the Zigzag district of Mount Hood National Forest at least, are not very efficient.
6. In order to improve conservation education by the Forest Service, Mount Hood National Forest should have a conservation education staff person (someone who has conservation education as a primary responsibility).

There is much that still stands to be learned about how to best implement conservation education on Mount Hood National Forest. What motivates people to come to the forest, and how can conservation education best play into that? Just what are people curious about and what are the important messages that the Forest Service has to share? Perceptions of and knowledge about Mount Hood National Forest are important to recognize both from the perspective of the public as well as from the perspective of the Forest Service as a public land management agency. A consideration of various experiences that lead to various conceptualizations and motivations also is vital to this discussion.

If conservation education is conceived of as "teaching" the public about various issues related to the conservation of natural resources and public lands, then "learning" has to be just as much a part of that dialogue. Teaching or learning cannot be unidirectional or only between the Forest Service and public. Teaching and learning within the Forest Service as an agency is critical to finding direction for the agency with regard to conservation education as well as for it's interactions with the public. Dialogue at, and between, various levels within the Forest Service and between the Forest Service and others should perhaps be at the core of any discussion about conservation education.

SECTION FOUR – SYNTHESIS

CHAPTER VII

FINAL DISCUSSION AND RECOMMENDATIONS

A Place to Start

Amidst the process of writing this final chapter, I presented my research findings relating to conservation education to the Mount Hood National Forest, Forest Leadership Team during a meeting at the forest headquarters in Sandy. The concept of Mount Hood conceived as a place was central to my presentation. Through the concept of *place* I was able to ground my presentation, that dealt with the importance of the fuzzy notion of subjectivity, in an established framework recognized by the Forest Service as "Ecosystem Management." What I presented seemed to be well-received and I noticed a number of meeting participants nodding their heads throughout the presentation. A district ranger approached me afterwards to thank me for coming and to remark that there were people in the room who "really needed to hear this."

By beginning to focus on the multitude of ways in which Mount Hood National Forest is conceived of as a *place*, that is, as an area of particular site-specific meaning, I am certain that better management on public lands can be accomplished. Whether National Forests are managed as diverse "places" or not, they are *perceived* in this way. Not only is Mount Hood National Forest composed of ranger districts, ecosystems, resources, and multiple uses. Mount Hood National Forest is also "seeing wildlife in natural ecosystems, spending time with people one cares about, being actively involved and engaged with the forest or activities on the forest, doing something for the first time, spending time in places that one considers beautiful, and doing something really exciting" (see Chapter 6, "Experiences"). Cheng et al. write that "[p]laces are not merely the physical backdrops of human action. Places constitute those actions, helping people find order and meaning in the world" (Cheng et al. 2003). Conservation education has considerable potential for both promoting ideas about Mount Hood National Forest as a "place" and for promoting interaction and dialogue between the Forest Service and the public so that different conceptualizations of "place" have opportunities to be recognized.

The concept of place can allow for diversity to exist within unity. The land, the forest, the specific sites – are where diverse, subjectively conceived of meanings converge. In order for a focus on place to meaningfully inform land management on the forest, this idea of diversity must first of all be embraced. It must be recognized that different groups of people have different meanings for the very same places. It must also be recognized that different groups of people may prioritize categories of place meaning differently (Presley 2003). In addressing the subject of prioritization of place meanings, Presley refers to the research of McAvoy (2002), for example, which shows that Americans may attach the highest priority to individual/expressive meanings followed by instrumental/goal-directed and then cultural/symbolic meanings for places while American Indians may reverse that order of priority.

Through my interviews it became very clear that even amidst the relatively homogeneous sample of forest visitors and residents that I interacted with, there were significantly diverse ways in which people seemed to conceive of Mount Hood National Forest as a place. Not surprisingly, the more deeply that I engaged with interviewees, the more this became apparent. Certainly a lot of meaning was still obscured. Through my more lengthy and involved interviews with Forest Service employees, more subtle details emerged. What is clearly apparent to me, that my research could only hint at but my experiences there reinforce, is that the people of Mount Hood (including visitors, residents and Forest Service employees) are place-based people. By this I mean that even though I could ask questions that would elicit responses about motivations, curiosities or experiences on the forest that did not include explicit representations of the place itself as being important, the place itself was the very context for responses (as well as for questions). Many responses that I received, *did* indeed involve reference to specific places. Mount Hood National Forest is a shared place that is recognized in diverse ways.

Once such diversity within a conceived-of place is recognized, it need not be a divisive barrier to land management efforts. In order for it not to be, however, does seem to require that a land management agency *not* take a stance of working from secure, supposed knowledge about "the public" (or "nature"). A more dynamic "understanding" seems to be required in which "understanding" is developed and maintained through dialogue – dialogue between the Forest Service and publics, within the Forest Service itself, and with the land.

Conservation education, it seems, could play a very important role in this because it brings the Forest Service and public together over the issue of bringing nature and people together.

People, Their Perceptions, and Place

It has been discussed in Chapter Four ("Nature and Subjectivity") that considerations of subjectivity are very important to considerations of "nature," despite arguments that nature is more "usefully" considered in "objective" ways. Some strong arguments against more so-called subjective considerations of nature assert that only in a so-called objective sense of nature is something that we all share and should all be collectively responsible for. This assumption, of course, obscures the fact that such a perspective towards nature, that conceives of nature as independent from any particular perspectives towards it, ignores the reality that this, in itself, is a perspective towards nature. Since it has been shown that diverse perspectives towards nature exist, perhaps a more fruitful direction, for land managers who confront diverse perspectives, is intentional engagement with these very perspectives. Scientific views of nature as ecosystems may be seen to be critical to current land management, but how people find meaning in those very ecosystems should also be critical to public land management, specifically to land management agencies with self-professed goals of promoting land stewardship. People and their perceptions must be conceived of as parts of these ecosystems, not separate from them.

Despite notions to the contrary, subjectivity, when *contextually* considered, is something that we all share. We may find diverse meanings in a place such as Mount Hood National Forest but we all find those meanings in *Mount Hood National Forest.* Through considerations of "place," we have a forum for dynamic realizations of shared "nature." A conceptualization of nature "shared" in this way is not a nature that is separate from humans. Likewise, a conceptualization of nature "shared" in this way is not a nature that can be "managed" without dynamic interaction. This interaction must include sincere dialogue and consciousness of, as well as engagement with, *diversity* – from the diversity of publics involved to the diversity of nature (and conceptualizations of it) itself. It seems that a shared nature, conceived of "subjectively," has potential to be far more robust than a shared nature conceived of more

"objectively," since it emerges from *and requires* engagement of people with the land *and* people with each other.

Identity and Context

While discussing the importance of context, I should note something about the difficulty that I faced in trying to keep the identities of most of my research participants anonymous. While I felt that protecting anonymity was important to encourage participation in my research, I became especially aware of certain meanings that were obscured by omitting certain identifying details. Personal identity is part of the context in which responses from participants emerged. I was much more aware of this in my representations of Forest Service employees since I have some previous and continued experience on the forest with these people. I was aware, for example, that the exact same thing said by one person might mean something very different uttered by a different person. Those same details that could put responses in context, however, could also be used to identify individuals and were thereby obscured to protect anonymity. This is certainly not unrelated to the fact that nature, subjectivity and identity might be thought of as closely interrelated (see Chapter 4).

Not only is identity always a significant part of the contexts in which we live, but the contexts in which we live (e.g. place) are a part of our identities. Tony Hiss writes that "[t]he human connection to place is not merely a close association but a continuum with all that we are and think we are" (1991). Protection and enhancement of self-identity has been found to be a recurring cognitive strategy uncovered in place-based research (Cheng et al. 2003). That is, people interpret places with relation to how they identify themselves. Cheng et al. give an example of a farmer, hunter and developer who might describe the potential of an open field respectively as rows of wheat, grazing grounds for a five-point buck or suburban home sites. It has been explored how places are fundamental to group identity as well (Cheng et al. 2003).

Multiple Meanings

In the first chapter, I asked whether or not Mount Hood National Forest as a place coincides with representations that we create of it. No matter how rich any individual representations may be, I think that the response has to be a firm "no." Certainly the Forest Service will and should continue to try to understand "the public" by whatever methods seem feasible (including surveys). These representations should not, however, be taken to be enough. In order to truly understand Mount Hood National Forest as a *place*, it seems that ongoing dialogue and interaction between "the Forest Service" and the "public" is absolutely necessary. Public lands indeed need to be re-imagined as the sites of diverse, meaningful and dynamic relationships.

National Forests have long been talked about as a category of public lands that are special for the "multiple uses" that they provide. Talking about forests in this way portrays them as generic places that merely provide the backdrop for *uses*, which are conceived of more dynamically. Places *constitute* these very actions, however, as some recent place research as pointed out (e.g. Cheng et al. 2003). In most cases, one place simply *cannot* be substituted by another, although many different "places" might coexist in the same landscape.

Having worked as an environmental interpreter for both the Forest Service and the Park Service, aside from significant differences in underlying philosophies of the two agencies, the biggest difference that I experienced was the sense of place that was fostered at the National Park where I worked (Yosemite), but not on Mount Hood National Forest. In both places, I met many individuals with strong senses of the respective locations as deeply meaningful places, but only at Yosemite, was this sense of place actually fostered by the agency. By fostering stronger place attachments, one might also be fostering greater land stewardship since we take care of things that we value. It might be argued that it is easier to promote a sense of a National Park as a place since what National Parks are (and are not) is more strongly defined than the same for National Forests with their broad spectrum of "multiple uses." By embracing a National Forest such as Mount Hood for its multiple and context-specific meanings, however (so long as these meanings come into dialogue with one another), even richer and more dynamic "senses of place," it would seem, could be fostered.

Dialogue

Carolyn Merchant (1996) writes, in reference to the complexity and nonlinearity of nature and history, that trying to tell such a "story" in a way more suitable to its complexity, a very different sort of story might arise. "It would be a story (or multiplicity of stories) that perhaps can only be acted and lived, not written at all" (p. 55). Maybe, in the case of Mount Hood National Forest and people's perceptions of nature there, this sort of idea connects back to the importance of active dialogue between public land managers and the public. Research into social aspects of public land issues are certainly a start, and increased dialogue also contributes to a certain degree. Maybe ultimately, however, the concept of "the public" needs to be rethought in terms of relationships, rather than as a discrete entity in itself that is separate from the public lands "themselves."

According to Dewey (as discussed in Chapter 3), a democratic community is unthinkable without the engagement of dialogue or communication. Working on the Zigzag ranger district of Mount Hood National Forest in the summer of 2003, I encountered a number of Forest Service employees who were actively trying to promote dialogue between the Forest Service and local communities and I became involved with some of those efforts. A comment that I often heard from others about the process was the incredible amount of time that developing and maintaining such relationships requires. I, myself, sat through endless hours of meetings only to have issues that were deliberated at meetings later reemerge in misunderstandings. Admittedly, promoting dialogue is not an easy process and some efforts *are* being made in that direction by certain characters in the Forest Service.

When I was a volunteer for the Forest Service on Mount Hood, I was probably more of a community member than a Forest Service employee since I was not included in much Forest Service dialogue (despite the fact that I wore a Forest Service uniform). At that time I lived on the forest and I interacted with some of the local residents (some of whom were also Forest Service employees). From this perspective, I was often very confused about the nature of the Forest Service as an agency. This was not aided by the fact that many of my friends and acquaintances had conflicting ideas about and perceptions of the agency. In considering this, it seems that although efforts are being made to promote dialogue through

specific parties that are invited to be part of planned meetings by the agency, how are those who are not invited included in this dialogue? *Who* are those who are not included?

At the moment, I do not have any concrete recommendations for how more inclusive dialogue could be engaged. Here I simply hope to point to some considerations that should be made within the process of deliberating new, more communicative directions for the Forest Service. How *can* a diversity of people who hold diverse meanings for Mount Hood National Forest as a place be included in meaningful dialogue? Maybe some of these people who have not traditionally been asked might have some answers.

Ecology

An ecosystem might be thought of as "a system of matter and energy transactions among populations of organisms of various kinds and between each of them" (Rappaport 1979). Hornborg (1996) argues, and many place researchers would likely agree that meaning must be included in this definition. In Rappaport's words, "an ecosystem might be thought of as a system of matter, energy [*and meaning*] transactions among populations of organisms of various kinds and between each of them." When referring to the transaction of *meaning* amongst people, such an "ecological" transaction might take the form of dialogue. It seems that this broader view of ecology, that includes social perspectives, is what the new paradigm of Ecosystem Management in the Forest Service seeks to embrace, to at least a certain extent. The concept of *ecology* is a useful one for conceiving of various publics and the Forest Service as interdependent with one another and with public lands, beyond its usual use in reference to non-human communities.

The public and public lands need to be considered more *ecologically*, that is, in terms of relations and interactions between parts instead of in terms of only the parts themselves. In this light, my own field research has sought to bring attention to the relationship between the researcher and that which is researched. It has also sought to bring attention to the process of representation in which the interaction between me and my reader takes place and which may obscure or bring to light various perspectives. These perspectives, in the case of my own research, are the meanings which various people find and create on Mount Hood National Forest. These are the very means by which people value Mount Hood National

Forest. If one hopes to protect the so-called natural ecosystems of Mount Hood National Forest, one needs to protect (and *recognize*) the so-called cultural ecosystems that constitute it as well.

I have come to recognize that perhaps the most robust root for conservation education must lie within larger re-conceptualizations of land management on public lands. Rappaport (1990) writes that "the concept of the ecosystem is not simply descriptive....it is also 'performative'; the ecosystem concept and actions informed by it are *part of the world's means for maintaining, if not indeed constructing, ecosystems*" (p. 68-9, emphasis original). Part of my project was to address the issue of conservation education on Mount Hood National Forest by the Forest Service. Through this exploration, in the context of a larger exploration relating to people's perceptions and experiences of nature, I have come to recognize that land management on public lands must be re-conceptualized in terms of *ecology*. These re-conceptualizations must involve a sense of dialogic interdependence between the Forest Service and "the public," between various parts of the Forest Service and between the people and the land. These re-conceptualizations must also include a sense of interdependence between all of the rich and meaningful conceptualizations that exist (or might arise) of Mount Hood National Forest.

Closing Remarks

Through this thesis I have approached the subject of people's perceptions of, and interactions with, nature on Mount Hood National Forest through various lenses; through a lens of self-reflection, a lens of theory and a lens of field research. It has been in the relationships *between* these various perspectives, made possible through these various lenses, that some of my own most meaningful understandings have emerged. Mount Hood National Forest is the site of those relationships; Mount Hood National Forest as a place.

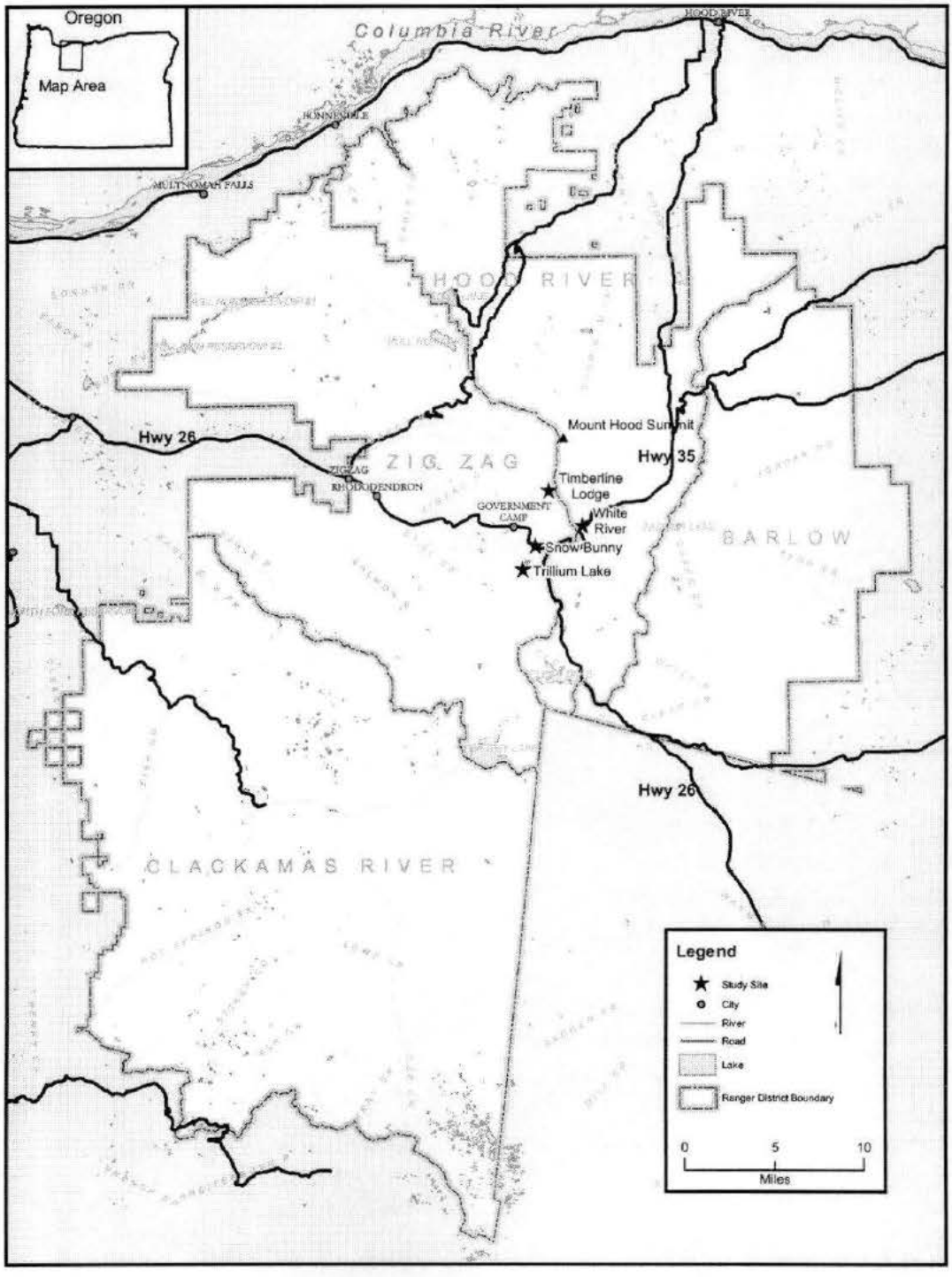
While in these pages there has been much focus on the importance of considerations of "subjectivity" to considerations of public lands, it is recognized that public lands are currently embedded in thick layers of laws and administrative rules, in other words, what might be thought to be ultimate "objectivity." Our public lands are "ecologically" a part of many larger social systems that define the United States of America and the present government of the people of this

land. Just as people's experiences of and perceptions of nature should not be considered to be separate from such systems within which they exist (certainly the Native Americans who set fire to meadows in the Mount Hood area to promote huckleberry growth conceived of the area differently than the present Americans who do all they can to suppress fires there), nor should any ideas about how to deal with management of and relationships with public lands be considered de-contextually. Extremely vital to contextualized thinking, however, is not to mistake dominance for "reality" (a similar concern to my considerations of representation). Do our layers of laws and administrative rules adequately recognize and make allowance for the greater context of the ecological systems within which they operate? In a lot of ways, re-conceptualizing our public lands involves re-conceptualizing their place (and ours) within larger systems.

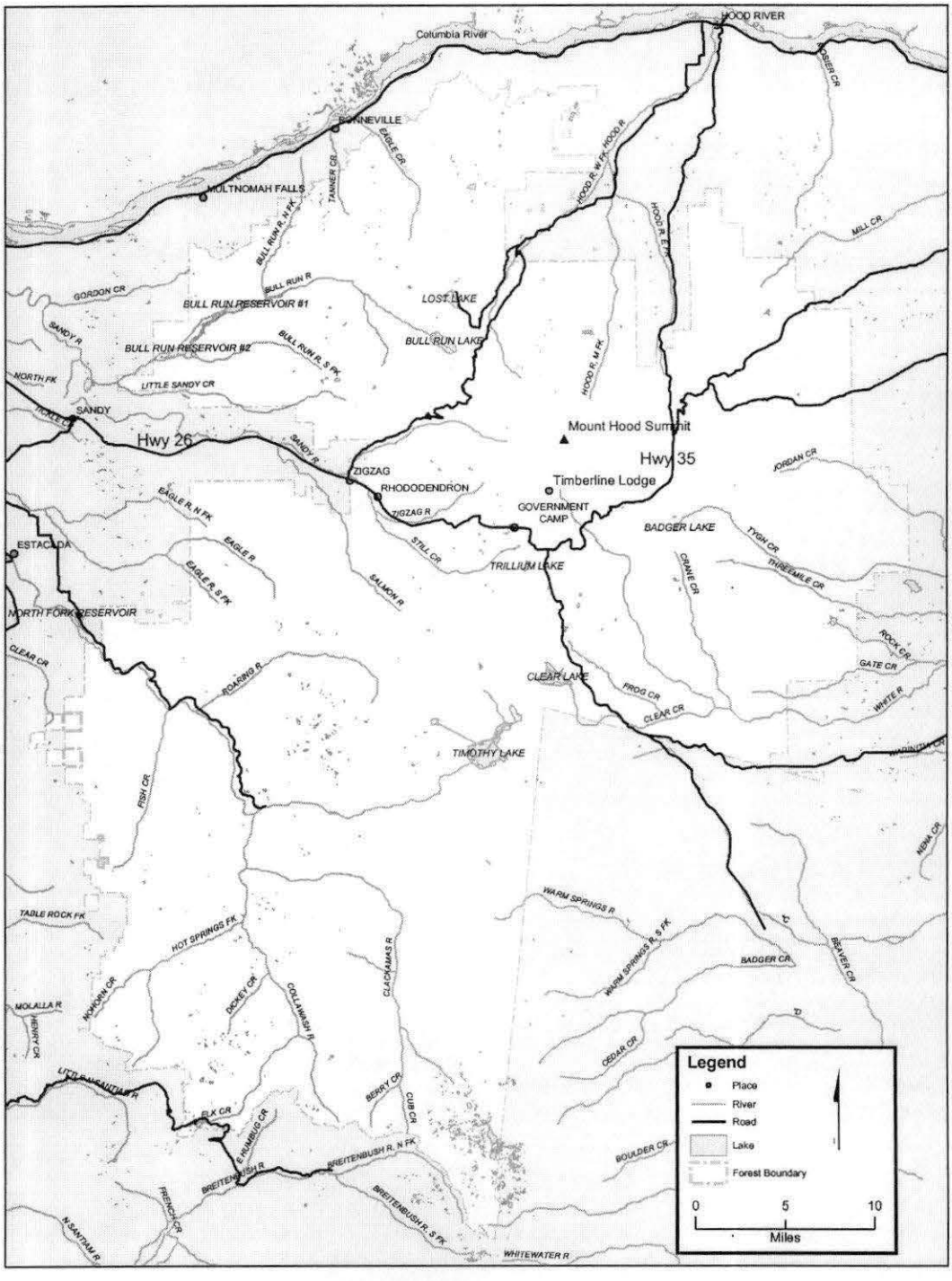
Conservation education is a means by which the Forest Service professes to seek to "connect people to the land" (CEFS 1999). How the Forest Service seeks itself to connect with "the people" is very much tied up within any such discussion. Conservation education by the Forest Service is a part of dialogue that should define management of public lands. Conservation education efforts, as well as this larger picture of land management and dialogue, should focus on Mount Hood National Forest as a place. People conceive of ecosystems as places. Not only that, but people contest or support management of public lands on the basis of diverse and conflicting conceptions of specific areas of public land as specific sorts of places.

While the paradigm of Ecosystem Management recognizes that people conceive of ecosystems as places, places also need to be considered as ecosystems, that is, more ecologically. By ecologically, I mean that place meanings need to be taken seriously in land management and the diversity of meanings needs to be protected. Not only do they need to be protected, but perhaps more importantly (and perhaps you cannot truly have one without the other) these diverse meanings need to be engaged in dialogue amongst those who hold those meanings close – whether it be through their habits or through their hearts. It is my personal conviction that the places that we call Mount Hood National Forest truly exist with or without human beings. I am simultaneously convinced that if they are going to exist *with* human beings, that our only means for taking care of those places is by recognizing *and engaging* those very ways in which we care about them.

APPENDIX A
MAP OF MOUNT HOOD NATIONAL FOREST (MHNF) AND STUDY SITES 2003–2004



APPENDIX B
MAP TEMPLATE OF MHNF USED FOR COGNITIVE MAPPING



APPENDIX C
EXAMPLES OF QUESTIONS FROM INTERVIEWS WITH FOREST SERVICE EMPLOYEES

Involvement with Mount Hood National Forest

- How long have you been involved with MHNF? In what capacity?
- Why do you work for the Forest Service? Mount Hood National Forest in particular?
- What is your job description?
- Do you like what you do?
- Do you spend time outside of work on Mount Hood National Forest? Doing what?
- What would you like to see in the future of Mount Hood National Forest?

Ideas about Nature

- Can you explain your involvement with "nature" and the outdoors? How did you come to be involved in these ways?

Sense of Mount Hood National Forest as a Public Place

- What do you think are the main reasons that people visit Mount Hood National Forest? Public lands in general? National Forests in general?

Ideas about Conservation Education on Mount Hood National Forest

- How involved are you with Conservation Education on MHNF?
- What role do you think that Conservation Education should play on Mount Hood National Forest?
- What are the most important messages that your program has to share with the public regarding Conservation Education? With other Forest Service programs?
- Is Conservation Education Working on Mount Hood National Forest?
- Do you think that Conservation Education is important?
- Do you have any ideas for improving Conservation Education on the Forest?
- What are your general thoughts/feelings about Conservation Education on the Forest?
- How do you think that the views of other Forest Service employees about Conservation education differ from yours?
- What do you see as the greatest hindrance/help to your own efforts to do Conservation Education? How in an ideal world would things be different?
- What do you think we should be trying to learn from the public regarding Conservation Education?

Personal Experiences on Mount Hood National Forest

- What is your most memorable experience working on Mount Hood National Forest?
- How did you decide to come to Mount Hood National Forest? Are you planning to stay?
- When you think of "wildlife" on Mount Hood National Forest, what do you think of?

APPENDIX D
EXAMPLES OF QUESTIONS FROM INTERVIEWS WITH FOREST VISITORS AND LOCAL RESIDENTS

- What brings you here today?
- Is this your first time on MHNF?
- How long/often have you been coming out here to MHNF?
- What is your most common reason for coming here?
- How would you describe your involvement with Mount Hood National Forest? (e.g. types of activities)
- What do you "know" about MHNF?
- Where/how did you learn it?
- Is there anything else you'd like to learn more about?
- What do you think are the main reasons that other people visit MHNF?
- What do you think should be the most important management objectives for this land?
- What ways do you think that the FS (as the major public land manager here) should interact with public concerning the forest?
- Does this happen?
- Anything you'd like to share with the FS?
- Have you ever attended a FS educational program? Volunteered on the forest?
- What were your experiences with that?
- What is your most memorable experience on the forest?
- What is a National Forest?
- How would you define "nature" (e.g. space/where?, inventory/what?, spiritual idea/how?)
- What do you think of when you think of "wildlife" on MH?
- What, to you, is the most important characteristic of MHNF?
- What would you most like to see in the future of MHNF?

APPENDIX E
AN EXAMPLE QUESTION FROM THE NVUM SURVEY (NVUS 2001)

In what activities on this list will you or did you participate in during this recreation visit on this National Forest?
(The survey-giver reads the question and then marks in the "bubbles" next to each of the categories receiving positive responses.)

- Camping in developed sites (Family or group sites
- Primitive camping
- Backpacking, camping in unroaded areas
- Resorts, cabins and other accommodations on FS managed lands (private or FS)
- Picnicking and family day gatherings in developed sites (family or group sites)
- Viewing wildlife, birds, fish, etc. on NF lands
- Viewing natural features such as scenery, flowers, etc. on NF lands
- Visiting historic and prehistoric sites/areas
- Visiting a nature center, nature trail or visitor center
- Nature study
- General/other – relaxing, hanging out, escaping heat, noise, etc.
- Fishing – all types
- Hunting – all types
- Off-highway vehicle travel (4-wheelers, dirt bikes, etc.)
- Driving for pleasure on roads
- Snowmobile travel
- Motorized water travel (boats, ski sleds, etc.)
- Other motorized land/air activities (plane, other)
- Hiking or walking
- Horseback riding
- Bicycling, including mountain bikes
- Nonmotorized water travel (canoe, raft, etc.)
- Downhill skiing or snowboarding
- Cross-country skiing, snowshoeing
- Other nonmotorized activities (swimming, games, and sports)
- Gathering mushrooms, berries, firewood or other natural products

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