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Access, Labor, and Wild Floral Greens Management in Western Washington's Forests

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Cover photo—The branches and tips of the salal plant, an evergreen shrub, constitute the mainstays of the floral greens industry in the Pacific Northwest. The commercial salal season on the Olympic Peninsula begins in late summer and runs through the following April or May when new shoots and leaves emerge. Photo by Kathryn Lynch.

Abstract

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This report compares the changes that took place between 1994 and 2002 in the nontimber forest product (NTFP) management regime that governed access to floral greens and other NTFPs in western coastal Washington. A rapid rural appraisal approach was used to gather data from 24 NTFP stakeholders during phase I (1994) and from 37 NTFP stakeholders during phase II (2002). Phase I findings summarized the rules of access to NTFPs on private, state, tribal, and federal lands in 1994, as well as comparing the perspectives of land managers to those of pickers and buyers regarding the need for and the impacts of those rules. A preliminary diagram of NTFP knowledge exchange networks was developed from information provided by informants who participated in the 1994 study. This diagram suggested that in 1994, buyers and land managers functioned as key information exchange nodes in NTFP networks at the study site.

Phase II findings indicated that the formalization of NTFP access process still nascent in 1994 had solidified sufficiently by 2002 that many pickers and buyers had come to take the permit requirements for granted. However, NTFP stakeholders noted that leases were increasingly difficult to acquire. It appears that a few larger floral greens companies based on the southeastern Olympic Peninsula now control most floral greens leases on private and state lands. By 2002, the floral greens labor market was dominated by Latinos, many of whom lacked legal work documents and thus occupied a precarious position in the labor market. To counteract the power of the larger buying companies, some of the smaller buying companies and harvesters have worked with social justice organizations to pressure the Washington State Department of Labor to enforce regulations regarding employer-contractor relations.

The study has several key implications for forest managers, including the need for managers and policymakers to recognize the heterogeneity of the harvester and buyer populations and to consider the possibility that interventions in domains seemingly unrelated to forest management, such as labor policy, might constitute key elements of a sustainable forest management strategy. The report ends with a list of steps managers and researchers can take to support sustainable floral greens management.

Key words: Nontimber forest products, forest policy, labor policy, resource tenure, sustainability, floral greens, salal, Olympic Peninsula.

Contents

1	Introduction
3	Chapter 1: Overview of the NTFP Literature
3	The International NTFP Context
4	The Domestic NTFP Context
9	Chapter 2: Research Design and Methods
9	Research Design
9	Objectives
10	Sampling
10	Study Site
10	Research Methods
12	Data Limitations
13	Chapter 3: Socioecological Context
13	Demographics and Local Governance
13	Physical Geography and Ecology
13	Historical Overview
15	Land Ownership Pattern
15	Quinault Reservation
15	Quileute and Hoh Reservations
15	Makah Reservation
15	Olympic National Forest
16	Olympic National Park
16	Washington State Trust Lands
16	Rayonier Holdings
17	Chapter 4: Research Findings, Phase I (1994)
17	Component One: Rules Governing NTFP Access
17	Treaty Rights
17	Statewide Rules
18	Landowner Rules for Controlling NTFP Access
21	Conflicts Over NTFP Claims
24	Perceptions of NTFP Regulations
28	Component Two: Knowledge Pathways
28	Constraints to Picker and Buyer Input
30	Knowledge Flows

31	Discussion of Phase I Findings
33	Chapter 5: Research Findings, Phase II (2002)
33	Current NTFP Policies and Key Issues
33	Access Issues
40	Labor and Industries Issues
42	Funding Cutbacks
43	Tribal Rights
45	Gender and Ethnic Issues
47	Discussion of Phase II Findings
48	Comparison of Phase I and Phase II Findings
51	Chapter 6: Conclusion and Management Applications
51	Utility of the Study Methodology
51	Applications of the Study to Floral Greens Management
53	Chapter 7: Recommendations for Future Research and Outreach
54	Acknowledgments
54	Metric Equivalents
54	References
61	Appendix 1: Common and Scientific Names of Plants

Introduction

During the 1980s and early 1990s, demand for Pacific Northwest nontimber forest products (NTFPs), such as yew bark, moss, mushrooms, and floral greens, increased rapidly. As harvesters began to remove larger quantities of these products, land managers and the general public began to voice concerns about the long-term sustainability of commercial NTFP harvesting in the region's forests. By the mid-1990s, a complex web of laws and regulations governing the harvesting and buying of NTFPs had emerged over much of the Pacific Northwest (McLain 2000). However, many harvesters and buyers have resisted these new regulations, and enforcement is often difficult and costly (McLain 2000).

In 1992, the United Nations Conference on Environment and Development identified sustainable forest management as a key element in sustainable economic development. Agenda 21, which emerged from this conference, set out nonbinding guidelines for sustainable forest management with specific inclusion of nontimber forest products. In 1994, the United States took part in the first working group session of the Montreal Process, in which participating countries began to develop criteria and indicators for sustainable management of temperate forests. Participants in the Montreal Process identified the conservation of biological diversity as criterion one—thus focusing additional policy and management attention on harvesting of nontimber forest products.

In 1994, the United States Department of Agriculture, Forest Service (FS), Pacific Northwest Research Station commissioned a team of social scientists affiliated with the University of Washington's College of Forest Resources to undertake an exploratory study of NTFP policy. This study, known as the knowledge, rules, and policy development project (KRPD), constituted a preliminary step toward providing managers with scientific information about the social and political aspects of NTFPs so that they could develop more appropriate and effective NTFP policies. The researchers involved in the study produced two master's theses (Kantor 1994, Robinson 1994) and one peer-reviewed article (McLain et al. 1998) based upon the information obtained from this exploratory study.

In the early 21st century, NTFP harvesting remains a point of contention in public and private forest management arenas in the Pacific Northwest. Despite a growing number of scientific studies of NTFPs in the Pacific Northwest during the late 1990s,¹ the kind of information produced by the KRPD study has yet to be produced in a publication that is easily accessible to land managers. Given the relevance of these data to efforts by the FS and other land management entities to manage forest ecosystems sustainably, in spring 2002 the Pacific Northwest Research Station commissioned the Institute for Culture and Ecology to synthesize the information from the 1994 study into one document in the form of a general technical report. The Pacific Northwest Research Station also requested that the Institute update the report to take into account the changes that have taken place in NTFP policy at the study site over the past 8 years. This general technical report thus contributes to the Station's ongoing efforts to produce knowledge about NTFPs in a form that FS managers can use to accomplish the agency's ecosystem management mandate.

¹ See, for example, Blatner and Alexander 1998; Hansis 1996,1998; Hosford et al. 1997; Jones et al. 2002; Love et al. 1998; Piiz et al. 1999; Richards and Creasey 1996; Vance et al. 2001.

The report consists of seven chapters. We begin with a brief overview of the NTFP literature to provide a sense of the international and regional context for NTFP policy and management in the Pacific Northwest. Chapter 2 outlines the project's research design and provides details about the methods used to gather and analyze data. Chapter 3 rounds out the introductory portion of the report with a description of the socioecological context for the study site. Chapter 4 summarizes the findings from the phase I field work. Chapter 5 describes the findings from phase II. Chapter 6 concludes the report with a discussion of policy implications, and chapter 7 provides recommendations for future NTFP research.

Chapter 1:

Overview of the NTFP Literature

The International NTFP Context

For most of the 20th century, forest scientists, managers, and policymakers throughout the world paid little attention to nontimber forest products. The very terms used to describe these products, i.e., minor forest products, special forest products, and alternative forest products, reflected the low economic and political status of these resources relative to timber. In the 1980s and early 1990s, however, scientists working in India, Latin America, and Indonesia began to document the economic value of NTFPs and found that in some situations aggregated NTFP values compared favorably with the costs and benefits of managing the same forest for timber only (de Beer and McDermott 1996, Panayotou and Ashton 1992, Peters et al. 1989). Studies of NTFPs in developing countries also indicated that these products are important sources of food, medicine, ornamentals, and materials for construction and crafts for many rural and urban residents (Thadani 2001).

At the same time, indigenous rights movements in Latin America, Asia, and Indonesia advocated for the recognition of indigenous peoples' intellectual property rights over NTFPs, particularly those with medicinal properties (Rubin and Fish 1994, Shiva 1997). Community-based movements, often allied with international environmental nongovernmental organizations, also successfully argued for the establishment of extractive reserves that would allow community members more secure access to NTFPs and other forest resources (Anderson and Ioris 1992). Likewise, research illustrated the importance of including rural communities in conservation strategies based on the extraction of NTFPs (Lynch 1995, Padoch et al. 1991). By the end of the 20th century, market-based conservation had become widely adopted among international aid organizations as a strategy for sustainable development (Crook and Clapp 2002).

Since the late 1980s, however, social scientists have noted that market-based NTFP conservation is not a panacea for sustainable forest management (Browder 1992, Fearnside 1989). In a recently published overview of market-based conservation efforts in tropical forests, Crook and Clapp (2002) indicate that this approach can undermine sustainable forest management efforts in situations where forest users lack the economic and political power to participate effectively in regional and global NTFP markets, or where monitoring and enforcement systems are inadequate to ensure sustainable levels of harvesting. Nonetheless, market-based NTFP conservation remains an important tool in the sustainable development toolkit.

As foresters and scientists started to acknowledge the roles that NTFPs play in the economies of developing countries, NTFPs began to appear in key international forest policy discussions and documents. The Food and Agriculture Organization (FAO) of the United Nations (UN) established a nonwood forest products program in 1991 to support the gathering and analysis of information on NTFPs (FAO 2002). Over the past decade, the program has sponsored regional and international workshops on NTFPs in Asia, Africa, Latin America, the Pacific Islands, the Near East, and northern Europe (Vantomme 1998). The program also has published documents on NTFP issues ranging from trade restrictions (Iqbal 1995) to domestication and cultivation of NTFPs in agroforestry systems (Leakey et al. 1996) to the role of medicinal plants in forest conservation and health care (FAO 1997).

In 1992, a year after the UN established its nonwood forest products program, participants in the UN-sponsored Earth Summit in Rio de Janeiro crafted Agenda 21 to establish guidelines for sustainable development and the conservation of biodiversity. Agenda 21 explicitly called for national and international support for programs addressing the use, management, and conservation of nonwood forest products (Tewari 1994). In addition, the Montreal Process, which has served as the impetus for 12 countries, including the United States, to develop criteria and indicators for measuring the sustainability of forest management in temperal and boreal forests, includes NTFPs among the forest products recommended for monitoring and evaluation (Montreal Process Working Group 1995). In addition, criterion one—conservation of biological diversity—is likely to be directly affected by NTFP management policies.

The Domestic NTFP Context

In the 1990s, NTFPs emerged as objects for scientific study and management in developed countries, such as the United States, Finland, and Canada (cf. Jones et al. 2002, Lund et al. 1998, Mohammed 1999, Tedder et al. 2002). The U.S. federal government's adoption of ecosystem management as a guiding policy for federal resource management in 1994 helped further interest in supporting the development and dissemination of scientific knowledge about NTFPs in the United States (Antypas et al. 2002). In response to their ecosystem management mandate, key resource management agencies, such as the FS, the USDI Bureau of Land Management, and the U.S. Fish and Wildlife Service, have begun to include NTFPs in the planning processes required under the National Environmental Policy Act (Antypas et al. 2002).

In 1999, the U.S. Congress included a rider on the FY2000 Appropriations Act (P.L. 106-113), which became the first piece of national legislation aimed specifically at improving NTFP management in the United States (Antypas et al. 2002). The rider, known as section 339, is entitled "Pilot Program of Charges and Fees for Harvest of Forest Botanical Products." Its provisions include requirements that the FS charge fair market value for NTFP harvesting permits and ensure that harvesting levels of NTFPs on national forests are sustainable. The FS is drafting regulations to implement Section 339.

The literature on NTFPs in the United States indicates that NTFPs have played and continue to play important roles in Pacific Northwest economies and cultural traditions (Alexander et al. 2002, Deur 2002, Turner and Cocksedge 2001). Prior to Euro-American settlement, American Indian societies throughout the region used a wide variety of NTFPs (e.g., barks, mosses, ferns, tubers, grasses, berries, and many other products), for food, medicine, clothing, beverages, art, crafts, and construction materials (Turner and Cocksedge 2001). Many American Indian societies in the Pacific Northwest actively managed local landscapes for NTFPs through the use of periodic burning, selective harvesting, pruning, weeding, and transplanting (Deur 2002, Turner and Cocksedge 2001). Recent archeological evidence suggests that camas fields in the region's forests and estuarine root gardens along the forest-ocean interface provided pre-European societies in the Northwest with a consistent and ample supply of staple root crops needed to support densely populated sedentary settlements (Deur 2002: 144–145).

The Euro-Americans who occupied the Northwest in the mid-1800s disrupted these indigenous NTFP management regimes through forcible appropriation of most of the region's land and by prohibiting key NTFP management practices such as periodic

forest burning (Deur 2002). However, the newcomers also relied on NTFPs for certain foods, medicines, construction materials, and crafts through the early 20th century (Arnst 1945: 805, Seely 1993: 2–3). Some products, such as tanoak (see appendix for scientific names) and western hemlock bark, were used to make tannin for the leather goods industry, and cascara bark, a laxative, became widely commercialized by the early 1900s (Arnst 1945: 805, Hergert 1983: 93). By the 1920s, a thriving floral greens² industry also had emerged in western Washington (Weigand 2002) (fig. 1). Kitsap and Mason Counties, which were situated close to markets in Seattle and Olympia, quickly gained a reputation as the heart of the floral greens industry on the west coast (Weigand 2002). The communities of Belfair and Shelton (in Mason County) continue to function as one of several core nodes of the Pacific coast's floral greens economy.

For most of the 20th century, the major species of floral greens reaching the market from the Pacific Northwest included salal, evergreen huckleberry, western redcedar, tall Oregon-grape, and western swordfern (Weigand 2002). In addition, sprays from Port-Orford-cedar were popular in floral arrangements in the 1940s (Shaw 1949: 6). By the 1960s, noble fir boughs had become the most popular evergreen bough used in wreaths (USDA FS 1965). Beginning in the late 1980s, beargrass also entered the floral greens market in large quantities (Weigand 2002).

During the 1930s Depression, many rural Pacific Northwest inhabitants relied upon the harvesting of NTFPs, including floral greens, evergreen boughs for ornamental wreaths, huckleberries, cascara bark (also known as “chittum”), and seed and ornamental cones, for income or subsistence use (Fisher 2002, Heckman 1951, Howell 1991). Twenty years later, Heckman (1951), a reporter for the *Saturday Evening Post*, noted that “brushpicking,” the term Puget Sound residents use to refer to floral greens harvesting, provided income for rural residents during difficult economic times and during lulls in the timber and fishing industries. She reported that the brush industry employed approximately 2,000 full- and part-time workers (Heckman 1951).

In the post-World War II era, as timber harvesting accelerated and disposable incomes increased in the Pacific Northwest, NTFPs became largely invisible to public and private forest managers. They reemerged on public forest policy agendas in the late 1980s and early 1990s, at a time when the Pacific Northwest was immersed in an intense political struggle over how to manage the region's remaining old-growth forests. A variety of factors prompted the renewed interest in NTFPs, including:

- The decline of the timber industry and the loss of timber-related employment in many rural areas of Oregon, Washington, and northern California.

² Blatner and Alexander (1998: 29) describe floral greens from the Pacific Northwest as follows: “Floral greens are understory plants harvested in the coniferous forests of the Pacific Northwest. Floral greens are used by the floral industry to provide structure and accent in floral arrangements and to provide long-lasting background for the more expensive and colorful flowers. Prominent plant species used as floral greens include salal (*Gaultheria shallon*), evergreen huckleberry (*Vaccinium ovatum*), dwarf Oregon-grape (*Berberis nervosa*), swordfern (*Polystichum munitum*), deer fern (*Blechnum spicant*), Scotch broom (*Cytisus scoparius*), and beargrass (*Xerophyllum tenax*).”



Figure 1—Floral arrangements sold by U.S. florists frequently incorporate nontimber forest products harvested in Pacific Northwest forests, including salal, swordfern, and beargrass. Photo by Susan Alexander.

- An increase in domestic and international consumer demand for natural and wild-crafted forest products (McLain 2000).
- Climatic conditions favoring the growth of some economically desirable NTFPs, such as morels and king boletes (McLain 2000).
- An increase in local supplies of certain NTFPs, such as salal and evergreen huckleberry, as a result of extensive even-age timber management and shorter rotations in the Northwest.
- A sharp increase in the numbers of Southeast Asian and Latino immigrants to the Northwest, and the creation of a large pool of laborers with limited employment opportunities (Hansis 2002, Richards and Creasey 1996).
- A growing recognition of the ecological importance of forest understory and the underground portions of fungal species.

In response to the renewed interest in NTFPs in the Pacific Northwest, in 1989 forest economists at Washington State University conducted one of the first economic studies of the NTFP industry in the United States since the 1940s. They estimated that the value of floral greens products originating in the states of Washington, Oregon, and the southern part of British Columbia was approximately \$128.5 million in 1989 (Schlosser et al. 1991: 71). Of this value, slightly more than a third, or \$47.7 million, was paid to harvesters for raw products (Schlosser et al. 1991: 71). They also estimated that the floral greens industry employed roughly 700 full-time workers and 4,180 part-time workers directly, and purchased products from 2,670 full-time and 2,750 part-time harvesters (Schlosser et al. 1991: 69).

In a similar study of wild mushroom processors in Washington, Idaho, and Oregon in 1993, Schlosser and Blatner (1995: 32) estimated that the value of wild mushrooms originating in the three states was roughly \$41.1 million in 1992. Roughly half of this amount, \$20.3 million, was paid to harvesters in exchange for their products (Schlosser and Blatner 1995: 32). Schlosser and Blatner (1995: 35) also estimated that the Pacific Northwest's wild mushroom industry employed roughly 10,400 part-time harvesters and 520 full-time employees in 1992. It is likely that many of the harvesters and processing workers also work in other NTFP industries (Schlosser and Blatner 1995: 33).

Similar data are unavailable for other NTFP industries in the Northwest, such as medicinals, wild edibles other than wild mushrooms, oils and resins, and handicraft products. Nonetheless, the above data for just two categories of NTFPs suggest that these products continue to make an important contribution to the region's forest economy. Recent ethnographic work on NTFP harvesters in the Northwest suggests that NTFPs also play important roles in many rural and urban household economies in western Washington and Oregon (Hansis 1996, 1998; Love et al. 1998; McLain 2000).

We identified the following major themes in our investigation of the published and gray literature on NTFPs in the Pacific Northwest:

- **Reliance on diverse income-generating activities:** Relatively few commercial harvesters earn income solely by harvesting NTFPs. Instead, they typically piece together a livelihood from a variety of income-generating activities, such as NTFP harvesting, farmwork, fishing, logging, construction, child care, or factory work (Brown and Marín-Hernández 2000; Hansis 1996, 1998; Love et al. 1998; McLain 2000). Others use NTFP harvesting as a way to supplement disability, Social Security, and welfare payments (Love et al. 1998, McLain 2000).
- **Multiple motivations for harvesting NTFPs:** People harvest NTFPs for a variety of reasons, including to earn income, for recreation, for subsistence, to obtain culturally significant materials, for spiritual fulfillment, and to maintain kinship ties (Love et al. 1998, McLain 2000, Richards and Creasy 1996). Many commercial harvesters also cite multiple motivations for participating in the industry (Hansis 1996, 1998; McLain 2000).
- **Formalization and expansion of NTFP management regimes:** Prior to the 1980s, many state, federal, and private land managers did not assert or only weakly asserted their formal claims to commercially harvested NTFPs on their lands, creating a situation of de facto open access for most NTFPs in the Northwest (Hergert 1983, McLain 2000, Shaw 1949). Since the mid-1980s, however, many managers of state, federal, and privately held forest land in the Northwest have instituted a variety of rules and management practices governing access to NTFPs ranging from long-term leases to permit systems to prohibitions on commercial harvesting (fig. 2). Formalized NTFP regulatory frameworks now encompass most forested land in Oregon and Washington and most categories of NTFPs.



Figure 2—An increase in illegal harvesting of nontimber forest products within the Olympic National Park during the 1980s and early 1990s prompted the National Park Service to erect no-harvesting signs along the park's boundaries in the late 1990s. Owing to the ethnic diversity of harvesters, the park developed signs in English, Spanish, Khmer, and Laotian. Photo by Kathryn Lynch.

- **Limited participation of commercial harvesters in NTFP policymaking:** Ethnographic work on NTFP harvesters suggests that some commercial harvesters have considerable knowledge about the species they harvest and the surrounding vegetation. Most NTFP policies on public lands, however, are developed without significant participation by knowledgeable commercial harvesters (Love et al. 1998; McLain 2000, 2002). McLain's (2000) study of public participation among wild mushroom harvesters in central Oregon identified a number of barriers to harvester participation in FS decisions including (1) inappropriate meeting formats, (2) scheduling of public meetings when few harvesters can be present, and (3) a bureaucratic subculture that undervalues local ecological knowledge.

Chapter 2:

Research Design and Methods

Research Design

This longitudinal study consists of two distinct phases separated by 8 years. Phase I took place in 1994. During this phase, Rebecca McLain reviewed the literature on NTFPs while Christina Robinson and Sylvia Kantor carried out the two field components. The first field component, carried out by Christina Robinson, examined the rules that governed harvesters' access to NTFPs. The second field component, conducted by Sylvia Kantor, explored the pathways by which knowledge about NTFPs flowed among key NTFP stakeholders. The phase I research team gathered data primarily on the wild mushroom and floral greens industries, two major NTFP industries operating on the Olympic Peninsula at the time.

Phase II of the project took place in 2002 and also consisted of two components: an update of the original study's literature review on NTFP policy and knowledge transmission, and a rapid rural appraisal of the changes that have occurred in the NTFP sector at the study site. Rebecca McLain and Kathryn Lynch carried out this fieldwork, mirroring the team approach used in the first phase of the project. Owing to time constraints and the decline of the wild mushroom industry on the Olympic Peninsula, we focused on the floral greens industry during phase II.

Objectives

The objectives for phase I consisted of:

- Developing an overview of NTFP rules and policies on the western Olympic Peninsula.
- Describing how knowledge flows through the system of NTFP management within the study site.
- Identifying the barriers and opportunities for participation in policymaking by those who have direct experience and dependence on NTFP harvesting.

In keeping with the original study design, the research objectives for phase II included:

- Identifying key themes with respect to NTFP policy and local NTFP knowledge transmission in the international and domestic literature on NTFPs.
- Describing state, federal, and private NTFP policies in operation at the study site.
- Analyzing how these policies affect harvesters and buyers operating in the study area.
- Developing a list of recommendations for future research directions in the NTFP policy arena.
- Providing suggestions for steps that public land managers can take to incorporate the knowledge and concerns of harvesters and buyers into NTFP policy decisions.

Sampling

In both phases of the project, the field researchers used snowball sampling to identify key informants. Snowball sampling consists of asking each informant to provide a list of additional informants. Because of confidentiality protocols, we did not have access to the list of phase I informants in setting up the interviews for phase II. We thus selected a new set of interviewees by using snowball sampling of the same categories of stakeholders interviewed in phase I.

Study Site

Fieldwork in both phases took place in western Washington (fig. 3). The phase I researchers selected the site because of the area's relatively long history of commercial NTFP harvesting. During phase II, we conducted most of our interviews with NTFP stakeholders located on the western Olympic Peninsula. However, we also interviewed stakeholders working out of Port Angeles, Port Townsend, Shelton, and Olympia in order to better understand the broader political, social, and economic context in which the western Washington floral greens industry is embedded.

Research Methods

The phase I field researchers began their investigation by participating in a variety of meetings and conferences related to NTFPs during fall 1993 and winter 1994. These meetings included four NTFP stakeholder meetings sponsored by the Washington Department of Natural Resources (DNR), a state legislative hearing on proposed revisions of the Washington State Wild Mushroom Act of 1989, two Olympic Peninsula-wide meetings to discuss the merits of forming a producers' cooperative sponsored by Washington State University Cooperative Extension, and a regional conference on NTFP issues and concerns sponsored by the Western Forest Conservation Association. The researchers then conducted semistructured interviews with 24 NTFP stakeholders during a series of visits to western Washington between February and June 1994. The 24 key informants included 5 pickers, 3 buyers, 2 private industrial timberland managers, 4 public land managers, 6 tribal members, 2 tribal land managers (nonnatives), and 2 research and development specialists. The researchers taped and took handwritten notes of all interviews, which they later transcribed into a computerized format. The researchers coded and analyzed the interviews for content about NTFP knowledge pathways, communication, and participation in NTFP management decisionmaking.

In phase II, we carried out the field portion of the study during two consecutive weeks in April 2002, a time that coincided with the end of the spring floral greens harvesting season for that year.³ We talked with 37 NTFP stakeholders, including 4 pickers, 1 van driver, 1 packer in a buying shed, 5 buyers, 2 private industrial timberland managers, 5 public land managers, 2 FS front desk employees who issue permits, 2 tribal land managers (1 native, 1 nonnative), 2 researchers, 6 law enforcement officials from various tribal, federal, state, and county offices, 5 people working for nonprofit organizations, 1 county commissioner, and 1 labor and industries representative. Ten of the informants were women.

³The short field session was feasible only because of the Institute's long-standing work on NTFP policy and management in the Pacific Northwest, including two seasons of indepth exploratory work on wild mushroom harvesting in the study site during the mid-1990s by one of the Institute's partners.

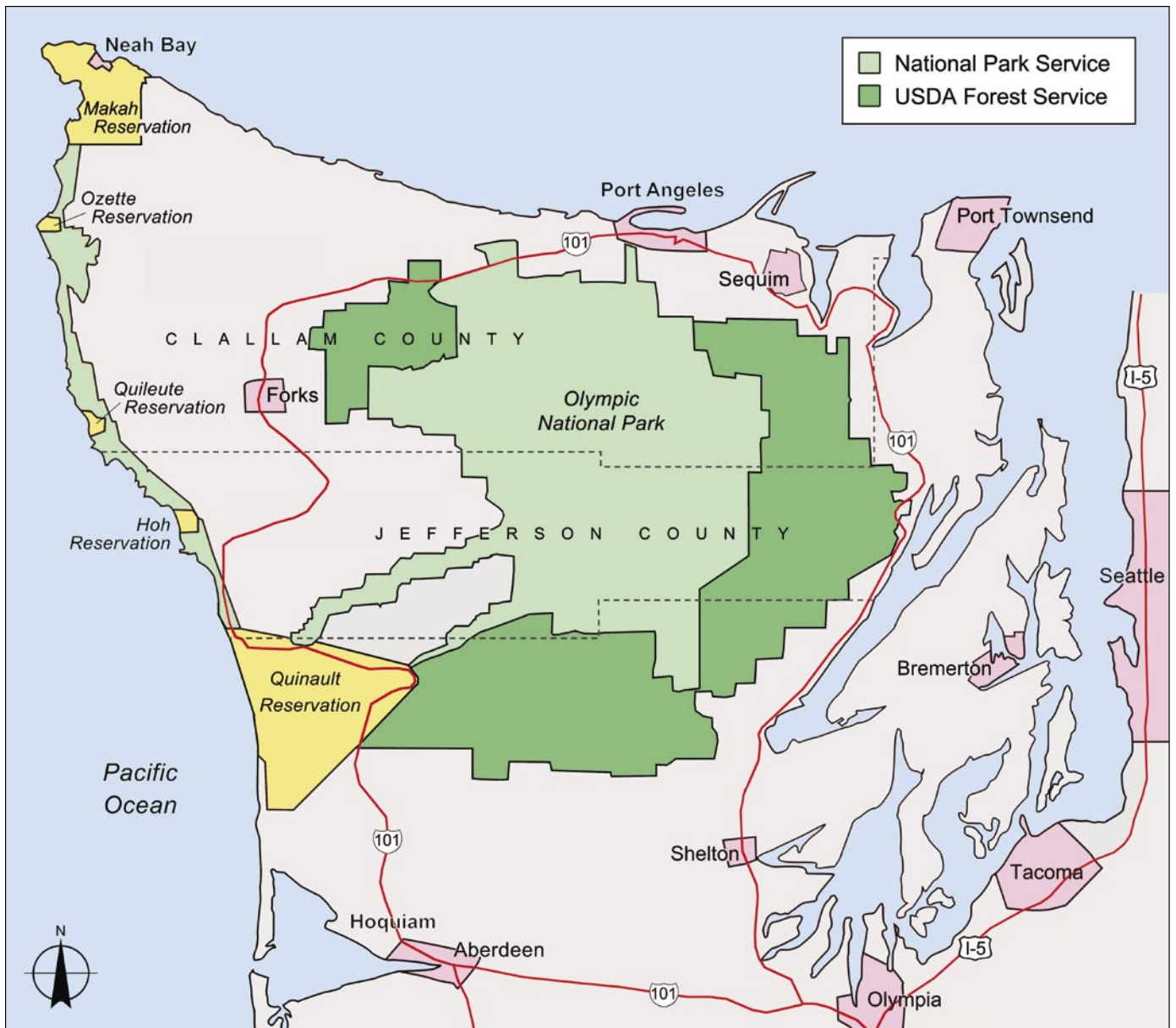


Figure 3—The study site encompasses the entire Olympic Peninsula.

We took handwritten notes of all our interviews and also taped our conversations with state and federal agency employees. Interviews with buyers and harvesters were not taped. Dr. Lynch conducted all of the interviews with Latino⁴ harvesters in Spanish. Given that many of the harvesters were newcomers to the region and some were undocumented workers, she opted not to take notes during those conversations. As Marín and Marín (1991: 42) note,

Hispanics could be expected to be more wary of researchers than are other ethnic or racial groups for a variety of reasons. Primary among these reasons is the concern that providing personal information may place some Hispanics at risk—for example when income or immigration information could be used against an individual.

However, time was set aside immediately following the interviews to record notes regarding the conversations. We transcribed all of the interviews, whether taped or handwritten, into a computerized format to facilitate coding and analysis. We coded the interviews by using the list of key themes as a template. Owing to time limitations, we were able to accompany only one harvester into his picking areas. All but one of the picker and buyer interviews took place at buying stations or processing locations.

Data Limitations

The rapid rural appraisal method is designed to provide preliminary information useful for designing more intensive data collection and project development strategies for longer term work. Although rapid rural appraisals are very useful for quickly identifying trends, issues of general concern, and key areas of contention, the data from such appraisals are necessarily limited in scope and should be interpreted with caution. In addition, the geographic focus of the project needs to be taken into account when interpreting the data for broader policy guidance. We conducted most of the interviews on the western half of the Olympic Peninsula, which has been and continues to function as a peripheral collection and marketing zone in the region's floral greens economy. Social and political relations identified in this study may differ considerably from those occurring in the floral greens industry's core areas, such as the communities located along the southeastern end of the Olympic Peninsula.

⁴ Although the term "Hispanic" is commonly used by federal agencies (e.g., the Bureau of the Census), the label is not universally accepted by its referents. In addition, many of the harvesters from Guatemala and southern Mexico are of non-Hispanic origin. Although there is no single term that is universally preferred, we have chosen to use the term "Latino" to refer to those individuals who were born in, or trace their family tree to one of the Spanish-speaking Latin American nations. See <http://www.nahj.org/resourceguide/intro2.html>, <http://www.fsu.edu/~elcentro/DidUknow.html>, and http://www.eagletribune.com/news/stories/19990523/LN_001.htm for further discussion on the debate.

Chapter 3: Socioecological Context

Demographics and Local Governance

The “west end,” as residents call the northwestern part of the Olympic Peninsula, has long had a reputation for being rugged and remote (fig. 4). The largest and only incorporated city in the west end is Forks, with a population of 3,120 in 2000. Unincorporated communities in the west end include Clallam Bay and Sekiu along the southern shore of the Straits of San Juan de Fuca, Neah Bay at the northwestern tip of the Olympic Peninsula, and La Push on the Pacific Ocean. Administratively, the west end falls under the jurisdiction of Clallam and Jefferson Counties, with Clallam County occupying the northern half and Jefferson County the southern half.

Physical Geography and Ecology

Geologically the west end belongs to the Olympic Peninsula Province (Franklin and Dyrness 1988). Elevation ranges from sea level to more than 6,500 feet in the upper reaches of the Olympic Mountain Range (Franklin and Dyrness 1988: 9). The average rainfall in Forks is 119 inches per year (Western Regional Climate Center 2002).

A large portion of the western Olympic Peninsula is covered with temperate rain forests classified as western hemlock zone or Pacific silver fir zone forests (Franklin and Dyrness 1988: 45), with a narrow strip of forest classified as the Sitka spruce zone along the coastline. The Sitka spruce zone forests are composed primarily of three coniferous tree species: Sitka spruce, western hemlock, and western redcedar (Franklin and Dyrness 1988: 59). Understory plants include swordfern, Oregon wood-sorrel, and red huckleberry on highly productive sites, and salal and evergreen huckleberry on less fertile ground (Franklin and Dyrness 1988: 59). Inland forests in the west end belong to the western hemlock zone. In this zone, Douglas-fir, western hemlock, and western redcedar dominate the overstory (Franklin and Dyrness 1988: 72). Understory plants include swordfern, salal, Oregon wood-sorrel, and Oregon grape among others (Franklin and Dyrness 1988: 73). The Pacific silver fir zone is located toward the middle of the Olympic Peninsula at elevations ranging from 2,000 to 4,300 feet (Franklin and Dyrness 1988: 93). Common coniferous trees in this zone include Pacific silver fir, western hemlock, noble fir, Douglas-fir, western redcedar, and western white pine (Franklin and Dyrness 1988: 94). Understory plants include Oregon wood-sorrel and deer fern, as well as devil's club (Franklin and Dyrness 1988: 96).

Historical Overview

At the time of European contact, the Hoh, Quileute, and Quinault people formed a loose confederation that controlled the area from Cape Flattery to what is now the city of Grays Harbor along the Washington coast (Ruby and Brown 1992: 81). The Makah occupied a precarious position on the northwestern end of the Olympic Peninsula between the Clallam to the east and the Quileute, Hoh, and Quinault to the south (Ruby and Brown 1992: 125, 161). In 1855, the Queets, Quinault, Hoh, and Quileute signed a treaty with the U.S. government in which they relinquished claims over the lands they had occupied in return for rights to what is now the Quinault Reservation (Ruby and Brown 1992: 170–171). The Makah signed a treaty with Isaac Stevens, the Washington Territorial Governor, in 1855 at Neah Bay (Ruby and Brown 1992: 126). Under the terms of this treaty, the Makah agreed to settle on a reservation at the very northwest tip of the Olympic Peninsula (Ruby and Brown 1991: 126).



Figure 4—The west coast temperate rain forest floor and understory provide excellent growing conditions for a host of nontimber forest products, including salal, swordfern, evergreen huckleberry, wild mushrooms, and moss. Photo by Kathryn Lynch.

The west end's physical remoteness limited Euro-American settlement of much of the region until the 1930s, when the federal government completed Highway 101 connecting west end communities to the cities along Puget Sound and the Pacific Coast (Kirk and Alexander 1990: 447). Farming, fishing, logging, and tourism formed the pillars of the area's economy during the late 1800s and much of the 20th century (Kirk and Alexander 1990: 463–483).

During the post-World War II era, the introduction of new logging technologies, such as the chainsaw and logging truck, and the development of a dense forest road system, increased the Olympic Peninsula's economic dependence on timber harvesting and processing (Williams 1992). In the 1970s, cedar harvesting and processing expanded when the FS started a salvage program for cedar that had been blown down during the previous decade (Buttolph and Kusel 2002). With just a few tools and a truck, cedar "rats" could earn from \$25,000 to \$30,000 per year in the 1970s, a good wage for the time (Buttolph and Kusel 2002). Beginning in the 1980s, Latino immigrants settled in the west end to work in the shake mills and on Christmas tree farms (Buttolph and Kusel 2002).

Timber harvesting, which had reached historical highs in the 1980s, dropped abruptly on federal and state lands in the early 1990s owing to a variety of factors, including the listing of the northern spotted owl under the Endangered Species Act, recessions in the early 1980s and early 1990s, and prohibitions on selling timber in export markets (Dietrich 1992).

The ethnic composition of Forks, the west end's largest settlement, also has undergone change, now with 15.5 percent of the population of Latino origin,⁵ up from 5.3 percent reported in 1990 (Buttolph and Kusel 2002). Agency employees and NTFP buyers interviewed as part of this study estimated that Latinos made up 90 percent or more of the floral green harvesters in the west end in 2002.

Land Ownership Pattern

Land on the western Olympic Peninsula is held under a variety of ownership types, including several tribal reservations (Hoh, Quileute, Makah, and Quinault), federal lands managed by the FS and the National Park Service (NPS), state trust lands managed by DNR, large industrial timber holdings including Rayonier and Simpson Timber, and a variety of smaller forest landowners. A brief description of the tribal, federal, state, and Rayonier holdings follows.

Quinault Reservation

The Quinault Reservation covers 189,621 acres, a far smaller territory than the 688,000 acres that the Indian Claims Commission recognized as belonging to the signatory tribes in 1858 (Ruby and Brown 1992: 176–177). The Quinault Reservation was opened up for individual allotments in 1892, and by 1933 no tribally owned land remained on the reservation (Ruby and Brown 1992: 176). The Queets, who had been allied with the Quinault at the time of the Euro-American invasion, have since intermingled with the Quinault, forming one tribe rather than two (Ruby and Brown 1992: 170–171).

Quileute and Hoh Reservations

Under the Quinault River Treaty of 1855, the Quileute were also supposed to live on the Quinault Reservation (Ruby and Brown 1992: 172). However, they refused to do so and eventually established their own 594-acre reservation at La Push in 1889 (Ruby and Brown 1992: 172). In 1893, the U.S. government also set aside a 443-acre reservation for the Hoh (Ruby and Brown 1992: 81–82). The Hoh and Quileute did not divide their reservations into individual allotments, and the land is held in tribal trust (Northwest Portland Area Indian Health Board 2002).

Makah Reservation

The Makah Reservation encompasses 31,356 acres (Makah Tribe 1999: 17). During the early part of the 20th century, roughly 8 percent of the reservation's land area was allotted out to individual tribal members under provisions of the Dawes Act (Makah Tribe 1999: 18). However, under the terms of the Indian Reorganization Act of 1934 (48 Stat. 984), the Makah lands left unallotted reconverted into tribal trust (Ruby and Brown 1992: 126–127). Additionally, Makah members cannot sell their individual allotments to people outside the tribe (Ruby and Brown 1992: 127). In 1893, the U.S. government established a 740-acre reservation at a site known as Ozette Village on the Pacific Coast, which was one of the five main Makah villages on the Olympic Peninsula (Makah Tribe 1999: 17). By the 1930s, all but one member of Ozette Village had moved to the main Makah reservation. The Makah now administer the land in conjunction with the National Park Service (Ruby and Brown 1992: 161).

Olympic National Forest

The Olympic National Forest encompasses 632,300 acres of the Olympic Peninsula. In 2000, the Forest was divided into the Pacific Ranger District on the west side of the Olympic Peninsula and the Hood Canal Ranger District on the east side. The Forest

⁵Because a large number of Latinos in the area lack legal authorization to work in the United States, this value is most likely an underestimation. One source estimated that the Latino population in the Forks area was close to 2,000.

headquarters is located in Olympia. The Pacific Ranger District, which has its headquarters in Forks, covers 271,300 acres. The district also maintains a field office at Lake Quinault, in the southern end of the district. The Hood Canal District encompasses 361,000 acres and maintains its field office in Quilcene and its headquarters in Hoodspport.

Olympic National Park

Olympic National Park was established in 1938 and currently occupies 913,286 acres of the Olympic Peninsula. Most of the land administered by Olympic National Park is situated in the middle to upper reaches of the Olympic Mountains and is accessible only on foot. However, the park boundaries also encompass riparian areas along both banks of the Hoh, Quileute, and Bogachiel Rivers and 63 miles of ocean beaches. The park contains three distinct ecosystems: coastal forests and beaches, dense lowland temperate rain forest, and alpine forests and glaciated highlands (ONP 2001: 3). Dense mats and curtains of moss cover downed logs and drape from the branches of the old-growth forest trees found in many parts of the lowland rain forest areas within the park.

Washington State Trust Lands

Like many other states, Washington acquired millions of acres in trust lands from the federal government when it obtained statehood. Unlike most other states, however, Washington retained the majority of these lands in state ownership rather than selling them. In the 1930s, the state acquired an additional 620,000 acres of abandoned timberlands, which are known as Forest Board trust lands (WA DNR 2002a). The DNR is charged with administering the state's 2.8 million acres of upland trust lands, as well as 2.5 million acres of aquatic lands (WA DNR 2002b). Clallam County has roughly 165,000 acres in state trust lands administered by the DNR, whereas Jefferson County has approximately 203,000 acres.

Rayonier Holdings

Rayonier, which was incorporated in 1926 in Washington state and whose holdings encompass 2.3 million acres in the United States and New Zealand, is the largest private holder of industrial timberlands in the west end. The company specializes in the production of paper and pulp (Rayonier 2002). Rayonier owns 379,000 acres of forested land in Washington, most of which is on the Olympic Peninsula (Rayonier 2002). Most of Rayonier's land in the west end is in second- and third-growth forests, composed primarily of western hemlock with some Douglas-fir, western redcedar, and Sitka spruce (Rayonier 2002).

Chapter 4:

Research Findings, Phase I (1994)

Component One: Rules Governing NTFP Access

Bromley's (1991) concept of the resource management regime served as the analytical framework for understanding the rules governing harvester access to NTFPs at the study site in coastal Washington. According to Bromley (1991: 22), a resource management regime is "...a structure of rights and duties characterizing the relationship of individuals to one another with respect to that particular environmental resource." He notes that resource management regimes are dynamic: "Institutional relationships are continually established (and redefined) in order to determine (and to modify) the scope and nature of the property regime over natural resources" (Bromley 1991: 22).

Resource management regimes encompass both formal and informal rules, laws, and regulations. The multiple layers of control over access (such as state rules, federal rules, treaty rights, international treaties, private landowner rules, and county and city ordinances) form a framework that shapes how benefits from natural resource management are distributed. The first component of the study examined the structure of the NTFP management regime in coastal Washington and explored the perspectives of NTFP stakeholders regarding who benefits from the existing management regime. These questions highlighted concerns that were unvoiced in formal NTFP policy arenas, and the answers provided information useful for more effective policy decisions.

The phase I research team found that in 1994, the NTFP management regime consisted of several layers of formal rules, including statewide regulations, treaty rights, and a variety of private and public landowner/land manager rules. Owing to the lack of time and resources, the phase I research team did not address mechanisms of informal control over NTFPs. Each layer of the formal control system is briefly described below.

Treaty Rights

In the study area, American Indian treaty rights to NTFPs stem from treaties negotiated between the various tribes and the U.S. government in the 1850s. Under the terms of the Neah Bay Treaty of 1855, the Makah secured "the right of taking fish and of whaling or sealing at usual and accustomed grounds and stations... together with the privilege of hunting and gathering roots and berries on open and unclaimed lands." Likewise, in the Quinault Treaty of 1855, the Quileute, Hoh, Queets, and Quinault Tribes reserved the "right of taking fish at all usual and accustomed grounds and stations... together with the privilege of hunting, gathering roots and berries, and pasturing their horses on all open and unclaimed lands." Fishing and shellfishing rights have been successfully tested and protected under federal and state court decisions. However, as of 1994, tribal rights to gather forest products at usual and accustomed grounds remained untested in the courts (Robinson 1994).

Statewide Rules

In 1994, two laws, the Washington State Specialized Forest Products Act of 1967 (RCW 76.48) and the Washington State Wild Mushroom Act of 1989 (RCW 15.90) governed the harvesting of nontimber forest products within the state's boundaries. The first, RCW 76.48, required that anyone harvesting or transporting NTFPs obtain a state permit, commonly called a "haul permit" for the counties in which the products were transported. In 1994, haul permits, which were issued free of charge, could be obtained at the county sheriff's office. The act was designed primarily as a mechanism for decreasing theft of nontimber forest products.

The second of these laws, RCW 15.90, was passed by the state legislature in 1989 to facilitate the gathering of statistics about the wild mushroom industry. This law required wild mushroom buyers and dealers to purchase a license from the Washington State Department of Agriculture. A buyer's license cost \$75 and a dealer's license cost \$375. In addition, the law required buyers to provide monthly reports to the Washington State Department of Agriculture on the value, quantities, and provenance of the mushrooms they purchased (Molina et al. 1993: 31).

Landowner Rules for Controlling NTFP Access

In 1994, landowners in the west end controlled access to NTFPs on their property in four ways (table 1): by issuing permits to harvesters, negotiating leases with harvesters, constructing physical barriers, and issuing and enforcing prohibitions on harvesting. In addition, most landowners also provided discretionary and free use access for certain products to tribal members on a case-by-case basis.

Permits—As indicated in table 1, in 1994, permits constituted the most common form of control among the landowners included in the study. The FS, DNR, and one private landowner issued commercial permits for brush. Both FS ranger districts issued short-term permits ranging in price from \$45 for a 3-week permit to \$50 for a 2-week permit. One private landowner and the DNR issued brush harvesting permits good for 1 year; the DNR permits were the most costly at \$300 per year, whereas the private landowner charged \$200 per year. The FS and two private landowners also issued firewood permits. Two of the tribes included in the study also issued permits for NTFP harvesting. The tribes that issued permits did so free of charge or for a nominal fee, but restricted the issuance of permits to tribal members. Although permits differed considerably in the conditions attached to them, all of the permit systems operating in 1994 granted nonexclusive access to an unlimited number of harvesters.

Leases—Unlike permits, NTFP leases offer harvesters the opportunity to enjoy exclusive access to NTFPs included in the area covered by the lease agreement. Only two of the landowners/managers included in phase I of the study offered leases for people interested in obtaining access to NTFPs on their land. One private landowner offered a year-long lease at \$1 per acre for each type of product harvested. The DNR offered leases for boughs at a minimum price of \$1,000 per year. Both the private and DNR leases allowed the lessee the right to sublet harvesting rights to other harvesters.

Physical barriers—All of the landowners included in the study used locked gates, road closures, and road ditching to restrict public access to their lands. The holdings of one of the private industrial landowners were accessible to harvesters only by passing through two staffed electronically controlled gates and paying a land access fee of \$9 per day or \$50 for 10 days.

Harvest prohibitions—Some landowners prohibited all harvesting on their lands, whereas others forbade the harvesting of certain products. The DNR district, for example, prohibited all commercial mushroom picking. One of the private landowners did not allow boughs or landscaping plants to be harvested, and the other private landowner prohibited commercial mushroom picking and bough harvesting. Olympic National Park prohibited harvesting of all NTFPs beyond personal consumption levels. The two tribes included in this part of the study prohibited all harvesting by nontribal people.

Table 1a—Landowner rules governing access to nontimber forest products, 1994: Forest Service

Landowner	Products	Type of control	Cost/time/amount	Documents required/other
USDA Forest Service	Mushrooms	Recreation free use	Free/one gallon per day per species	None
	Mushrooms	Commercial	\$50/2 weeks \$8/3 days \$120/year	Photo (not ID, just a photo); no raking allowed
	Brush	Permit (FS1)	\$45/3 weeks (900 bunches @ \$0.05)	Photo (not ID, just a photo); does not require proof of citizenship
	Brush	Permit (FS2)	\$50/2 weeks (500 bunches @ \$0.10)	Driver's license or legal ID with photo; license number; color, make of vehicle; does not require vehicle insurance
	Firewood	Permit	\$5/cord	Intent is personal use; 10-cord maximum
	Cultural use (cedar, cedar bark, etc.)	Permit	\$10/area	Tribal member must get regular permit for commercial access

Table 1b—Landowner rules governing access to nontimber forest products, 1994: Washington Department of Natural Resources

Landowner	Products	Type of control	Cost/time/amount	Documents required/other
Department of Natural Resources	Mushrooms	Recreational (no commercial mushroom permits available)	Free/no permit required Personal use = 3 gallons of one species or a total of 9 gallons per person per day	None
	Brush	Permit	\$300/calendar year per area	Driver's license, insurance, vehicle description; different color card for windshield each year
	Boughs	Permit	\$300/year	Same as above
	Boughs	Lease	Minimum annual payment \$1000 to \$1500; pay per pound	
	Boughs	Direct sale	If valued at less than \$1000 the price is set by foresters as a one-time deal	
	Cultural use	Tries to accommodate need	Variable	

Table 1c—Landowner rules governing access to nontimber forest products, 1994: private land

Landowner	Products	Type of control	Cost/time/amount	Documents required/other
Private owner 1	Brush and mushrooms	Permit	\$200/year per county	Driver's license; car insurance; no permit needed for recreational mushrooms
	Firewood	Permit	\$10/year (fall to late March)	Personal use
	Cultural use	Individual basis (rare)	Variable	
	Boughs	Prohibited	No permit available	
Private owner 2	Brush	Lease	\$1/year per acre per product, prorated quarterly	Name, address, driver's license, vehicle license; can put other people on area
	All products	Access permit	\$9/day; \$25/3 days; \$50/10 days; family and senior rates offered	Driver's license, release of liability
	Mushrooms	Discouraged	No permits	
	Boughs	Discouraged	No permits	
	Firewood	Permit	\$5 to \$10 per pickup load (depending on size)	

Table 1d—Landowner rules governing access to nontimber forest products, 1994: National Park Service and tribes

Landowner	Products	Type of control	Cost/time/amount	Documents required/other
National Park Service	Cultural use	Free use		Access for tribes with documented ancestral ties to resource
	Edible mushrooms, fruits, berries	Free use for personal consumption	Free, 1 quart per day per person	
Tribe 2	Commercial brush and mushrooms	Permit	Free	Restricted to tribal members
Tribe 5	Firewood	Permit	Free	Restricted to tribal members
	Brush	Permit	\$15 per operator per year; \$7.50 per cutter per year	Restricted to tribal members
	Mushrooms	Permit	\$25 per operator per year; \$12.50 per cutter per year	Restricted to tribal members
	Seedlings/cones	Permit	Free for operator; \$7.50 per cutter	Restricted to tribal members
	Beargrass	Permit	\$25 for operator per year; \$12.50 per cutter per year	Restricted to tribal members
	Cultural use by other tribal members	Determined on an individual basis		Restricted to tribal members

Discretionary and free use—Most of the landowners offered American Indians indigenous to the area access to NTFPs for cultural uses. One of the FS ranger districts charged tribal members a \$10 fee for cultural uses of NTFPs. The DNR and one of the private landowners stated that they tried to accommodate tribal requests for NTFPs, such as cedar bark or logs, without charging a fee. Two tribes allowed members of other tribes to harvest NTFPs for cultural uses on their lands on a case-by-case basis. Both FS ranger districts and the DNR district required tribal members to adhere to permit or lease requirements for commercial NTFP harvesting. All of the landowners but one private industrial landholder allowed people to harvest wild mushrooms recreationally at no cost.

All of the landowners and managers interviewed indicated that during the previous 5 years they had either created a new NTFP program, made changes to their existing program, or increased the cost and added quantity restrictions for permits or leases. The intensification and expansion of the rules governing NTFPs across diverse landownership groups represent an effort by landowners to assert claims over resources that have begun to acquire greater or more consistent commercial value.

Conflicts Over NTFP Claims

The phase I team identified a variety of conflicts over claims to NTFPs in the study area, including conflicts related to American Indian treaty rights, conflicts between competing commercial pickers, and conflicts related to the clash between formal property rights and informal usufruct rights.

Conflicts related to treaty rights—Conflicts related to treaty rights occurred between landowners wishing to prohibit or limit tribal NTFP harvesting on their lands and tribal members seeking to assert their claims to gather in their usual and accustomed grounds, including lands held under federal, state, or private ownership. An increase in commercial picking exacerbated NTFP treaty rights conflicts in the mid-1990s, as tribal pickers found it increasingly difficult to locate cultural products on lands permitted out to commercial pickers:

Salal berries, I don't know who's taking them all, but they're cutting it, using it for the florists...whoever's out there, they're stripping, and now we can't even go pick the berries any more, because there's no more berries. They cut them, they take them and break them, and they sell it to the florists. It's really destroying everything that we had. That we didn't have to buy, but we went out and harvested it ourselves. (Tribal Picker 1)

Other conflicts related to treaty rights included complaints by tribal members and tribal resource managers of public and private landowners and managers engaging in practices that destroyed important NTFPs (fig. 5). For example, one tribal picker described how logging and herbicide spraying had destroyed traditional berry-picking and grass-gathering areas:

When they logged, everything was destroyed...The logging just destroyed and picked up everything that was any good." (Tribal Picker 4)

And all that [grasses used in baskets] has been sprayed upon. And they don't grow anywhere anymore. Even our blackberries, you know, we used to get alongside the road...We can't go out there anymore...they just cut them down because they say they're in the way...Now I have to go all the way over to [two towns in the region] to look out there in the woods, there where they're



Figure 5—Clearcutting on the Olympic Peninsula has greatly influenced the abundance of nontimber forest products during the past century. Some species, such as salal, thrive in younger forest stands. Products that grow more prolifically in old-growth stands, such as swordfern and moss, however, have become more difficult to find on the landscape. Photo by Kathryn Lynch.

not spraying. I have to go all that way. And it takes us hours before we can go back. [We're] really deprived of all these things which we need. (Tribal Picker 4)

Competing property rights—Competition among commercial pickers also decreased pickers' ability to find and harvest NTFPs in the study area. In some cases, the conflicts took the form of a competition between private rights holders. The permit systems used in the study area engendered competition because the landowners issue an unlimited number of permits to the same piece of ground. As the following quote from one of the buyers interviewed during phase I indicates, the practice of issuing unlimited nonexclusive use permits created frustration among those who make their living picking NTFPs:

You know, after you pick the ferns and the other person's got a permit to go in there to pick ferns, there's nothing left to pick. It's got to be better arranged. (Buyer 3a)

Conflicts also occurred between pickers and landowners over land use practices. A DNR manager noted that pickers complained about the negative effects of logging on their harvesting grounds:

[W]e've had people that have had either a permit or before that a direct sale, and have become really upset when the timber goes down on what they figure was their best picking area, and "Gee, I paid this money, and you ruined the brush." (DNR Manager 2)

Conflicts between formal and informal claims—Conflicts between formal property rights claims and informal usufruct claims constituted a third category of competing rights claims identified during the study. As Fortmann and Starrs (1990) noted in an article on conflicts over firewood claims on national forests in northern California in the 1980s, forest management regimes consist of both statutory property rights and customary use rights. As the commercial value of NTFPs increased in western Washington during the late 1980s and early 1990s, public and private landowners began to assert long-held but previously unasserted claims over a variety of forest understory products. Long-term harvesters, such as the picker quoted below, expressed frustration over the imposition of new or stricter rules:

We've got to fight to have the right to go down here and pick... And the severity of all of this has just come upon us within the last 2 or 3 years I would say... but people still have to live. So what are we going to do? (Picker 4)

The following comment by a FS manager supports the view that pickers in 1994 perceived themselves as having a customary use claim to NTFPs:

So we've got a lot of locals that have just grown up as kids picking and now they're middle-aged adults, and then we have a lot of other cultural groups that have come in, and there's a bit of animosity there ... People sometimes will come in and say well, so and so was in my patch. And that's on public land. (FS Manager 1)

The conflicts among competing property claims in 1994 were further heightened by the presence of a large percentage of unpermitted harvesters and the inability of landowners to enforce their rules. A variety of factors, including mixed land-ownership patterns, inconsistent regulations, and lack of landowners' and managers' resources to adequately patrol their lands all contributed to what Bromley (1991) refers to as an insufficient authority system. Pickers and landowners alike expressed frustration about the effects of poaching on the ability of legally permitted pickers to maintain access to an adequate supply of resources:

But you'll pay your permit, and you'll go up there, where you had a nice patch of moss. And you find somebody on there without a permit. That don't make you feel good. (Picker 2)

[Y]ou've got a patch like this here, and it's full of ferns, and you pay good money to have it leased, and maybe you have to go to town or something some day and don't get out there, and you go out there, it's gone. So, what have you got? (Buyer 3a)

But there is so many little backroads that people can take... it's just hard to keep up with it. But that's one of the complaints that I've heard even, you know, from our brush pickers that try to stay legal, you know, get their permits. They complain quite a bit whenever they go out to an area they've found, and there's people already there ahead of them that do not have permits. And so, you know, they don't think it's fair, and if that continues then all of a sudden they stop getting permits. (FS Manager 1)

Perceptions of NTFP Regulations

Landowner perspectives on the reasons for NTFP regulations and on the benefits and costs of restrictions differed substantially from the perceptions of pickers and buyers. In interviews, the landowners emphasized the reasons their organization had implemented NTFP rules, and either didn't mention or minimized the effects of the rules on NTFP harvesters and buyers. Concerns that had prompted landowners to impose stricter rules on NTFP harvesting included (a) wanting to maintain control over actions taking place on their lands; (b) wanting to minimize damage to resources from picking activities; (c) needing to follow rules imposed from higher organizational authorities; and (d) needing to meet public or shareholder concerns about obtaining revenues for products harvested on agency, company, or tribal lands.

In contrast, pickers and buyers emphasized the effects of the rules on themselves and others. They expressed confusion about why the rules existed, and skepticism about the effectiveness of the rules in addressing landowner concerns.

Control over landholdings—All of the landowners and managers who participated in the study cited the need to maintain control over the activities taking place on their lands as a key reason for imposing new and stricter restrictions on NTFP access. As the quotes below indicate, many of the controls were aimed at reducing the likelihood of vandalism, theft of timber, refuse dumping, and forest fires, all of which increase land management costs:

[F]or 30 years we had the tree farm pretty much open...there was dumping and there was poaching and there was vandalism and there was theft. And as other companies closed their lands, the pressure on ours became more.... So we decided that we had two alternatives. One, we could just close out the world totally. The other was that we could go for a fee for access.... So that's why we did that. It also gives us better control. We know who is out there.
(Private Landowner 2)

Well, just to restrict access, that way we don't have to maintain roads as often, people out driving them all the time.... It reduces our maintenance quite a bit. The last few years' garbage rates have gone up a hell of a lot out here. So we've been getting a lot of garbage on our lands. And people cutting trees down for firewood, and things like that. There's a lot of reasons for putting a gate on. (Private Landowner 1)

You could have one fire and they've just lost millions of dollars of the resource. So why take the risk? (FS Manager 1)

Some controls, such as gates and other physical barriers were aimed at keeping out the public in general, and are not directed specifically toward NTFP harvesters (fig. 6). Permit and lease systems also helped landowners keep track of who was on the land, as well as the number of people who were harvesting NTFPs. As the following quotes from buyers and pickers indicate, they acknowledged some of these concerns as legitimate:

Well, one reason that the landowners do it is to control who is on their land and who isn't. Now if they've got a road that's through their land, and they go out and there's a whole load of garbage, and old beds, furniture and stuff piled up there, they've got to move it. And it's going to cost them money. Well, people...bring that part on themselves... because people abuse the privilege.
(Picker 3)



Figure 6—During the early 1990s, many private and public landowners on the Olympic Peninsula gated off roads previously open to the public. Although the rising incidence of unauthorized garbage dumping and vandalism, as well as concerns for wildlife, prompted many road closures, the gates also reduced harvesters' access to harvesting sites they had relied on in past years.

I think it [the gating and permits] first probably mostly started because of the cedar; the stealing of cedar shake bolts, I think got it started pretty good. They like to track who's going in and out of their lands... They like to know who's littering up their property. (Buyer 1a)

On the other hand, pickers and buyers expressed concern that more restrictive access affected pickers disproportionately compared to other forest users:

I know what the timber companies around here say is that most of them go out there and they might poach and steal and leave a lot of junk out in the woods. So they're digging up the roads, putting up gates, stuff like that. Which I can see their point. But a lot of that, though, too, is not from the picker. A lot of it is from the other people going out there. But why, if that's the case, then why cut off the person that's out there making a living? (Buyer 2)

Concerns about resource damage—All of the landowners also mentioned concerns about resource damage from NTFP harvesting and related activities as another important reason for imposing stricter rules. Some landowners, such as the private landowner quoted below, were concerned about effects of NTFP harvesting on timber:

We don't give out bough permits...We have had problems in the past, they strip them too clean, and if you clean the limbs off a tree it will kill it...Plus, if they're out there digging [transplants] who knows, there might be a huckleberry plant right next to a nice little fir that's about 6 years old that we planted and they might damage that in the process. (Private Landowner 1).

Others were concerned about the impact of NTFP harvesting on the NTFPs themselves:

We would encourage someone to go in, like for salal. If you pick salal, and actually prune it one year and pick it properly the next year, you can cultivate it so that you get a lot more new growth But if you go in there and you just whack her all out, then you are done, and so are we. (Private Landowner 2)

Public land managers voiced similar concerns. The FS, for example, had recently closed some sites to moss and salal harvest because of such concerns:

[If] we see that hey, the moss is really starting to disappear, then we'll just shut that area off. And there will be no moss harvesting for about 2 to 3 years. (FS Manager 1).

I think because of the number of pickers that we've had, that it's been a fairly good impact on the salal. We've had to close areas down. Some of the real accessible sections got hit pretty good, so we're trying to keep them closed, probably till fall, and see how the new growth comes out before we allow permits back in there. (FS Manager 2)

Similarly, one of the tribes included in the study had restricted NTFP harvest to tribal members because of concerns about resource damage from outsiders. Although pickers and buyers acknowledged that some pickers pick in ways that damage resources, they felt that the new rules unfairly targeted all pickers instead of those actually doing the damage.

Need to meet public or shareholders' financial management expectations—

Landowners noted that the need to obtain some financial return on their resources in order to cover the administrative costs of allowing NTFP harvesting had prompted them to increase harvesting permit, road access, or lease fees. By the mid-1990s, landowners had also begun to shift to using longer term permits as a way of reducing administrative costs. Similarly, installing gates and closing down roads reduced road maintenance costs and costs incurred from illegal dumping or vandalism. Concerns about financial liability in cases of accidents also prompted landowners to require permittees or lessees to provide proof of vehicle liability insurance.

The two private landowners included in the study stated that the permit systems they applied in 1994 allowed them to cover their direct costs and make a small profit. Although the FS permit fees were potentially high enough to cover administrative costs, revenues generated from the sale of NTFP permits went into the General Treasury in Washington, D.C., and thus were not directly available for local use. The DNR, which had been under severe criticism for not charging enough for its NTFPs, raised the prices for NTFP permits and leases in order to meet its trust obligations.

The pickers and buyers who participated in the study acknowledged that landowners had a legitimate interest in making enough in permit fees to cover their costs. However, several pickers and buyers observed that the fees seemed excessively high for the amount of product that one could harvest:

I did pay the state for a permit on this land, but it had expired, and I found all this stuff in there. But it's not enough left to afford to get a permit. If they had some way, where you could get, like there's maybe \$50 worth of moss there. If you could pay them \$10, maybe. But the minimum permit is \$300. (Picker 2)

Now there wouldn't be, people wouldn't be complaining, if they said now all you got to do is give us \$24 and you go ahead and pick. There wouldn't be any complaints from any of us. But not when they say hey, I've got to have \$500 bucks, I've got to have \$300 before you can go onto this land. (Picker 3)

[N]ow I don't know if it's because the state's losing so much money on the timber that they're getting this attitude or what....I really don't know what the reason is that they're so greedy that they have to take money from the poor person that's trying to make a living. (Buyer 3a)

Need to follow orders from higher authorities—Some of the changes in the NTFP regulatory system in western Washington during the early 1990s were prompted by policy direction imposed from authorities located outside the study area. The need to follow organizational policies established without taking into account local conditions contributed to feelings of ambivalence and frustration among the local landowners and managers who implemented the rules.

If I was in charge I would just tell them to go pick all you want. Because the brush grows so beautiful out here...I think all you're looking at is whether we're covered for liability reasons, and whether it's making money. At our corporate office...those guys wouldn't know brush if they saw it. (Private Land Manager 2)

Two of the buyers interviewed clearly recognized the constraints that land managers must contend with, noting that many of the rules existed because of decisions made outside the area:

The only thing is [the local FS manager] says he don't have a say in it, you know. He's the guy that to me uses good common sense, and a lot of them go by the book, most of the stuff doesn't work out by what they read out of the book. (Buyer 2)

The people that you're dealing with, it's not their fault that they're charging for permits. Sometimes when you get real irate and you just **need moss**, it's hard to remember that. They're only working there, they're doing the same thing I am. They're trying to make a living. (Buyer 1a)

Meeting public needs—In addition to financial, stewardship, and liability concerns, all of the landowners in the study said it was important for them to maintain an NTFP program to help address local economic needs. For the FS, however, the need to provide locals with opportunities to earn income from the forest conflicted with the national push toward ecosystem management and rising concerns about the potential ecological impacts of NTFP harvesting.

Two pickers told of land managers who had acted in a way they felt indicated the managers had an understanding of how to structure an NTFP program to meet public needs. One picker cited the FS decision to increase the time allowed under the brush harvesting permit from 2 to 3 weeks as an indication that someone within the agency understood the difficulties of the pickers. Another picker noted that the DNR field personnel provided information about potentially valuable harvesting sites. Importantly, however, this same picker made a distinction between the DNR field personnel and those who worked primarily in the office:

We've found the local rangers to be real good. I won't say for the upper office, but the fellow who is out in the woods, he's pretty decent. (Picker 2)

Although some pickers mentioned having positive relations with land managers, as the following quotes illustrate, the majority of pickers and buyers had a much more cynical view of NTFP policymakers:

The thing is that a person doesn't have a clue what it's all about till they go out and do it...The people that are making up these laws for the permit, they don't have a clue about it, unless they get out and try it themselves. (Buyer 2)

[B]ut us little peons that are trying to make a living, they don't care. Their payroll's going all the time. You know, if you've got a payroll coming in, why do you stop and think about the guy that doesn't have a loaf of bread or some peanut butter to put on their bread to feed their babies? (Buyer 3a)

They are getting a darn good salary for setting up there and telling us how to do things. And they don't know a thing about it. So do you think they want to know? No. They want the old paycheck coming. (Picker 3)

Different perceptions of the effects of rules on pickers and buyers—Landowners and land managers commented that their rules had few negative effects on pickers, and tended to dismiss pickers' and buyers' complaints as unfounded. Several land managers, for example, noted that pickers continued to purchase permits even when prices went up. However, one DNR manager noted that with the rise in the cost of DNR permits, pickers who used to obtain DNR permits shifted to picking on FS lands because their permits cost less. The landowners and managers who took part in the study commented that their new rules were beneficial because they enabled them to keep better track of the number and location of harvesters on their lands.

In contrast, the pickers and buyers interviewed during the study stated that new permit requirements and rising permit costs had a substantially negative impact on pickers in particular. They noted that the more restrictive rules and the added expense for permits had created a situation in which pickers were more likely to pick illegally. In particular, study participants commented that the new restrictions had decreased the access of part-time and very low-income pickers to NTFP resources. In addition, as landowners shifted toward greater use of gates, pickers no longer had access to some productive areas. The difficulty of enforcing the rules, however, meant that pickers and buyers who chose to adhere to the rules could not compete as well in the marketplace as those who chose to ignore the rules and thus incurred fewer costs.

Component Two: Knowledge Pathways

Constraints to Picker and Buyer Input

Component 2 of phase I identified constraints preventing people with NTFP harvesting experience from participating in NTFP policymaking. It also examined how knowledge about NTFPs flows in coastal Washington's NTFP management system.

Pickers and buyers mentioned two major barriers to getting picker and buyer input into policymaking: language differences and perceptions among pickers and buyers of landowners and managers as uncaring and uninterested in obtaining information about NTFP harvesting. Additionally, they noted that some pickers and buyers prefer to remain invisible.

Language differences—Some respondents identified language differences as an element that hinders the flow of buyer and picker knowledge into NTFP decision-making. As illustrated by the following quote, one aspect of language barriers was the presence of a large number of non-English-speaking pickers:

Many of them don't speak a word of English. But yet we give them permits that have resource management concerns, you know, of different, you know, diameter limits on mushrooms or so many pounds of a certain product, areas they cannot pick in. And so to try to convey that to them, to me, is the number one thing. And so just to be kind of proactive on that. And just learn to interact, to understand their side of the issue, too. (FS Manager)

Similarly, a research and development specialist likened science to a foreign language that most lay people cannot speak or understand. She felt that this language barrier between scientists and pickers and buyers made it difficult to incorporate local knowledge into scientific NTFP management:

[Science] is a foreign language... and it's so structured and calculated, the complete opposite of the way they're used to operating. (Research and Development Specialist)

Perceptions that land managers lack empathy—Another barrier to picker and buyer participation in NTFP policymaking in 1994 was the widespread perception that forest landowners and managers lacked empathy and understanding of what it was like to make a living in the NTFP industry:

They don't know how it is to go out and pick this stuff and make money off of it...The big timber companies are just like your government, I mean that that's the way they're set up too...What I do, I buy from the poor person. When a person gets down to where they've got to pick brush, or ferns, to have gas money, food money, stuff like that, I mean. I see it everyday. Those people write up the laws, they don't see it. (Buyer 2)

I've never seen any of them if they've ever been out here to be interested, it may be the FS or DNR but us little peons that are trying to make a living, they don't care. (Buyer 3)

A number of pickers and buyers expressed the belief that managers and policymakers needed to spend time on the ground, actually doing some harvesting themselves, in order to gain an appreciation for the economic and practical difficulties associated with the industry:

People like in Washington, D.C., they don't know really what's happening. I said you need to get out there and you need to see it. You need to see it with your own eyes to understand. [Tribal Member 1]

The best thing would be to put them out here and make them earn their living the way we do. And then they'd know what we were up against....That would be the very best education they could have. Take them out in the woods. Show and tell. [Pickers 3 and 4]

I think the ideal situation would be to have someone come from the capital and come and say spend a week at [company name], just observing. They need to see the type of people that are picking, how hard pressed these people are...they need to come in here and get the firsthand experience, to see a picker walk through the door that's near froze to death. (Buyer 1)

They just do not understand it. Now if we could have one of those fellows, or two of them, we'd take them out into the woods for a week, they'd come back a changed person. (Picker 4)

Desire to remain invisible—Although some pickers and buyers wanted to increase their interaction with managers, others noted that becoming more active in policymaking and knowledge sharing might create difficulties for some categories of pickers and buyers. For example, undocumented workers had a strong incentive to remain invisible and were unlikely to want to let their presence be known or to share their knowledge about NTFPs with landowners or land managers. Similarly, tribal members expressed hesitancy about sharing their cultural traditions with outsiders.

Knowledge Flows

As part of the analysis of the phase I data, Kantor (1994) constructed a communication network diagram for five stakeholder categories: pickers, buyers, private land managers, public land managers, and tribal members/land managers (fig. 7). The completed diagram indicated that in 1994, buyers and public land managers functioned as key nodes within the NTFP stakeholder communication network, in the sense that multiple stakeholders talked with them and they also communicated with a variety of stakeholders. The private managers were the least varied in terms of the kinds of stakeholders they talked with. For example, one private land manager talked with no one else about NTFPs, while the other talked with company staff, private security, and public law enforcement. By contrast, public land managers included buyers, other public land management staff, and public law enforcement officials on their lists of information sources.

The six tribal respondents listed a wider variety of communication contacts, including other tribal members, pickers, buyers, public land managers, and research and development specialists. The three pickers included other pickers, public land managers, private land managers, and buyers among the three people they talked with most about NTFPs. Buyers listed pickers, other buyers, private land managers, and public land managers. None of the buyers, pickers, private land managers, or public land managers included tribal members or tribal land managers in their lists.

Although the ability to generalize from this diagram is limited owing to the small sample size, the communication network diagram nonetheless identified some key areas where communication gaps existed among a broader group of NTFP stakeholders. In particular, the diagram suggested that land managers had very limited contact with harvesters, and thus were likely to be basing policy decisions on the basis of second-hand knowledge from other public managers and law enforcement officials. Although public land managers obtained information from buyers, it would be risky to assume that buyer information is an adequate substitute for information from harvesters.

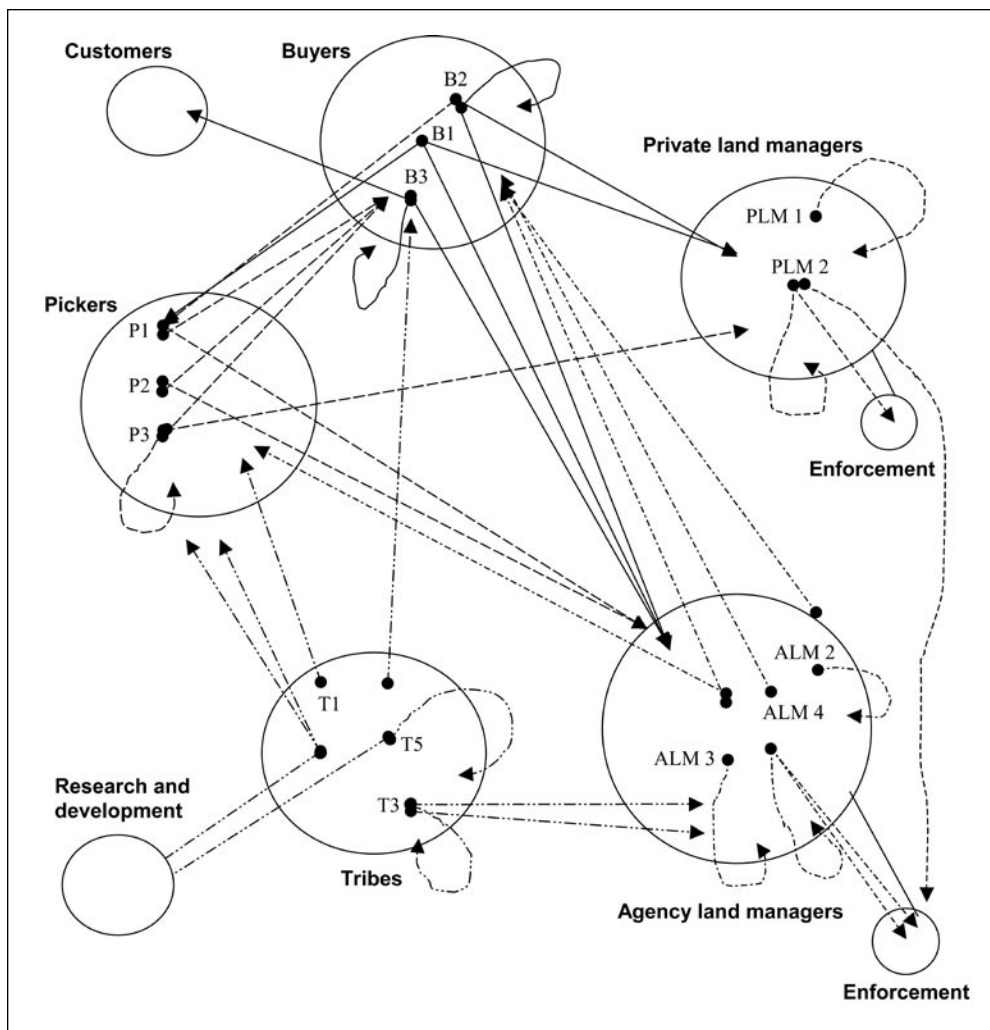


Figure 7—Nontimber forest products industry communication network (1994 field work). Node indicates interview; arrow indicates category of actor named in response to the question: Who are three people you talk with most about NTFPs?

Discussion of Phase I Findings

The phase I data indicated that NTFP management in western coastal Washington in 1994 was shifting from a regime in which customary usufruct claims over NTFPs prevailed to a system based on the assertion of formal (statutory) claims over NTFPs by a diverse set of landowners and managers. The conflicts among and between NTFP stakeholders were in part conflicts between stakeholders, including many harvesters and buyers, wishing to exert informal claims and stakeholders, such as landowners, land managers, and tribal harvesters, wishing to exert formal claims over resources previously viewed as largely outside the realm of statutory law. An unintended side effect of the increased formalization of the NTFP regime was a reduction in Euro-American residents' interest in harvesting NTFPs. The buyers and pickers interviewed during phase I indicated that the standardization of permit and lease policies across ownerships had increased access costs, thus reducing opportunities for part-timers

to participate in the harvest. At the same time, however, buyers and pickers noted that NTFP harvesting did not provide most harvesters with “family wage” incomes. By 1994, the increase in competition for NTFPs, lower daily earnings, and the elimination of part-time harvesters, had shifted the position of NTFP harvesting in the local economy from being an important, but generally supplemental source of income for a broad range of inhabitants in the study area, to being a poorly paying full-time seasonal occupation for people with few income-generating options. Informants noted that Latino harvesters made up an increasingly larger percentage of NTFP harvesters in the study area. The study also indicated that very weak communication links existed between landowners/managers and harvesters in 1994. Consequently, the NTFP stakeholders with the most extensive local ecological knowledge about NTFPs did not play a major role in the development of NTFP regulatory systems operating at the study site.

Although changes in management policies contributed to some of the changes in the NTFP industry at the study site in the mid-1990s, it is important to note that other factors not addressed by this study also played a role in the shifts within the industry. Other likely change-inducing factors included changes in the younger generation’s employment opportunities, increased professionalization of the workforce, and competition for access to buyers.⁶

⁶Kurt Spreyer. 2002. Personal communication. Ph.D. candidate, University of California at Berkeley, Environmental Science, Policy, and Management Program.

Chapter 5:

Research Findings, Phase II (2002)

Current NTFP Policies and Key Issues

In phase II, the study team gathered data about state, federal, and private NTFP policies in operation at the study site in 2002. These data allowed us to document the changes that have occurred in the NTFP sector since phase I. Owing to time limitations, we focused our data-gathering efforts primarily on policies related to the harvesting of salal and evergreen huckleberry branches and tips.⁷ Five significant themes surfaced in the course of the study: (a) changes in policy that impact access to the NTFP resources, (b) Washington State Department of Labor and Industries issues, (c) funding mechanisms for NTFP programs, (d) issues surrounding tribal reserved rights to NTFPs, and (e) gender and ethnic issues. Each theme is discussed below.

Access Issues

Although commercial brush harvesting on the Olympic Peninsula dates back to the early 1920s, only recently has the brush industry expanded into a multimillion dollar industry. As one manager commented, “Special forest products used to be a mom and pop operation;...folks picked for a little extra change...Now it is a large industrial operation.” Responding to these developments, the policies and rules that govern access to nontimber forest products on the Olympic Peninsula have increased in complexity. Unsurprisingly, these changes have been at the center of much discussion, debate, and controversy. Although the economic, political, and social impacts of these changing policies on the diverse stakeholder groups are still largely unknown, the tensions between land managers and other stakeholder groups appear to be increasing.

To understand the current situation, it is useful to sketch out the variety of means by which a brush harvester might currently operate. The primary harvesting options available on national forest, state, Olympic National Park, tribal, and private industrial timberlands within the study site are summarized below. Some of the options are legal, others are not.

Harvester Options in the West End, Olympic Peninsula

National forest land

- Buy individual permits from the Forest Service (3 weeks, \$45, 900 bunches of salal).
- Harvest brush without a permit.

State Trust lands

- Buy individual permit from DNR (annual, \$350, unlimited bunches).
- Harvest brush without a permit.

Private industrial timberlands

- Buy permit from brush shed that has a lease (pay stumpage fee to shed).

⁷For the purposes of our analysis, the term brush harvesting encompasses salal and evergreen huckleberry branches.

- Work with a driver who has a permit from the brush shed (pay driver, pay stumpage fee to shed).
- Bid on lease from timber company (sealed-bid winner pays lump sum).
- Harvest brush without a permit.

Tribal lands

- Harvesting open to tribal members only.
- If tribal member, rules differ; harvesting on an allotment within a reservation requires landowner consensus.
- If not a tribal member, harvest brush without a permit.

Olympic National Park land

- Harvest brush without a permit (not open to harvesting).

Depending upon the land ownership and the specific geographic location, harvesters might gain access to brush via individual permits, contracts (commonly referred to as “leases”), or subleases (table 2). In addition, a permit (officially known as RCW 76.48 Specialized Forest Products Permit, and commonly called a “hauling permit”) is required in order to transport commercial quantities of NTFPs on state highways and roads. This permit is free and is administered by counties for the state of Washington. During phase I, land managers recognized that this system needed streamlining. Since that time, personnel at the DNR, FS, and Rayonier field offices have been deputized to issue the state hauling permit when harvesters purchase their individual permits or leases.

The RCW 76.48 law also requires buyers to keep records showing from whom they buy products and the seller’s permit number. Buyers disliked this requirement, arguing that keeping track of permit numbers and names is a law enforcement responsibility. However, some buyers said they were complying with the law and showed us their sign-in sheets, which record harvesters’ names and permit numbers. One buyer pointed out, however, that these records do not provide information on the quantity purchased, nor where the harvesters acquired their product. Consequently, the buyer questioned the effectiveness of the recording requirement as an element of an effective tracking and monitoring system.

Regardless of how harvesters gain access to the land on which they harvest, they need transportation to get to the work sites. Many Latino harvesters do not own their own vans or trucks, so a system similar to that used in the agricultural sector has developed in which van owners, sometimes called crew leaders or “raiteros,” provide harvesters transportation to and from harvesting sites for a fee. According to one harvester, this fee varies between \$5.00 and \$10.00 day. At the end of the day, the van driver picks up the harvesters and their brush and takes them to a buying shed where the brush is sorted, counted, and packed into boxes that are shipped to larger wholesale distributors and exporters located primarily around the Shelton area on the southeast end of the Olympic Peninsula (fig. 8). Sometimes the raitero collects a percentage of the value of the brush harvested, called a “stumpage fee,” a term that reflects the cultural tradition and language of the timber system dominant in the region. As brush sites are located on rural roads, often in remote areas that are not easily accessible, harvesters have few options but to pay these fees to the driver.

Table 2—Landowner rules governing access to brush, 2002

Landowner	Location	Access	Cost	Time	Amount
Forest Service	West end	Individual permits	\$45	3 weeks	900 bunches
Forest Service	East end	Leases	Open bid	Variable	Unlimited
DNR	West end	Individual permits	\$350	Annual	Unlimited
DNR	East end	Leases	Open bid	Variable	Unlimited
Rayonier	West end	Leases	Sealed bid	November through May	Unlimited
Simpson	East end	Leases	\$2.50 per acre	Variable	Unlimited
Makah	West end	Tribal membership and consensus of parcel owners	Free use permit	Variable	Variable
Quinault	West end	Tribal membership and consensus of parcel owners and permit from Bureau of Indian Affairs	Free use permit	Variable	Variable
WA State	State roads	Hauling permit	Free	Variable	Variable

Note: DNR = Washington Department of Natural Resources.



Figure 8—Floral greens harvesters sell their products to floral greens wholesalers, known as brush sheds. Brush shed operators process and box the materials for shipment to florists around the globe. European floral markets purchase a large percentage of the floral greens harvested in Pacific Northwest forests. Photo by Kathryn Lynch.

However, the relationships between drivers (or crew leaders) and harvesters are not necessarily exploitative. Work crews often comprise extended family members and friends. Often the person with the greatest English skills becomes the crew leader by acting as the intermediary with land managers and brush sheds. In addition, crew leaders often have been in the area longer and understand how to navigate through legal and cultural systems more effectively. Although some crew leaders harvest brush themselves, others do not. The informal rules that govern these social networks are poorly understood and understudied.⁸ Developing a better understanding of this system is complicated by the fact that many of the harvesters are wary of researchers for a variety of cultural, political, and economic reasons (Marín and Marín 1991).

If harvesters choose to harvest brush without a permit, whether on private or public lands, they risk being caught and having their product and vehicle impounded, in addition to possible fines, jail time, and, if they are undocumented, deportation.

Federal lands—In the west end of the Olympic Peninsula, the FS Pacific Ranger District issues 3-week permits to individual brush harvesters. This permit allows the harvest of 900 bunches of salal from a designated area that the harvester identifies and requests, and which is specified on the permit. This permit costs \$45.00 per person, and the permit cannot be transferred to another person. In 2001, the Pacific Ranger District issued 184 individual permits for salal, bringing in a total of \$8,280 to the FS. Figure 9 provides data on two of the most critical nontimber forest products for the district—salal and firewood—for 2001.

Although brush and firewood are central components of the FS NTFP program on the western Olympic Peninsula, the FS also regulates access to a variety of other forest products. These include moss and ferns, which also are harvested for the floral greens market. Moss in particular has been at the center of debate, with many land managers believing that current harvesting techniques are unsustainable given the reproductive characteristics of moss (fig. 10). One manager noted,

We probably aren't going to sell any [moss permits] this year, because it is damaging the resource...It used to be with moss that they would take a 2-foot strip, leave 1 foot, take 2 feet, leave 1 foot, so it was checkerboard. Well in about 5 years they can go back and take the 1-foot strip, and have the 2-foot strips still growing. Well, if you strip the whole log off, and maybe instead of 5 years, they have to wait 10 or 15 years. So in order to protect the resources, we'll just shut it down for a year, maybe 2 years.

Moss harvesting has been widely publicized in recent years owing to a case where harvesters with FS permits were caught illegally picking moss in Olympic National Park (Gottlieb 2000). This has led to greater pressure on managers to protect the resource. Subsequently FS lands adjacent to national park lands in the west end have been closed to harvesting. Table 3 provides a summary of the nontimber forest products policy from the FS Pacific Ranger District for 2002.

⁸ The California Institute for Rural Studies noted that even within the realm of agricultural labor, which has been the focus of research and advocacy, the phenomenon of *raiteros* is generally understudied (Sherman 1996).

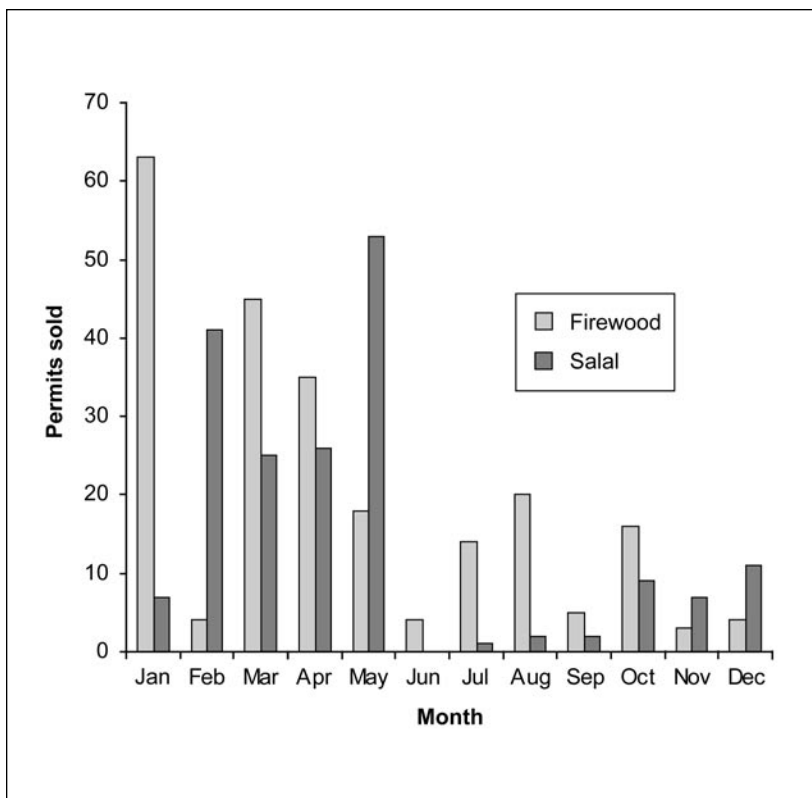


Figure 9—USDA Forest Service, Pacific District Office permit sales, 2001.

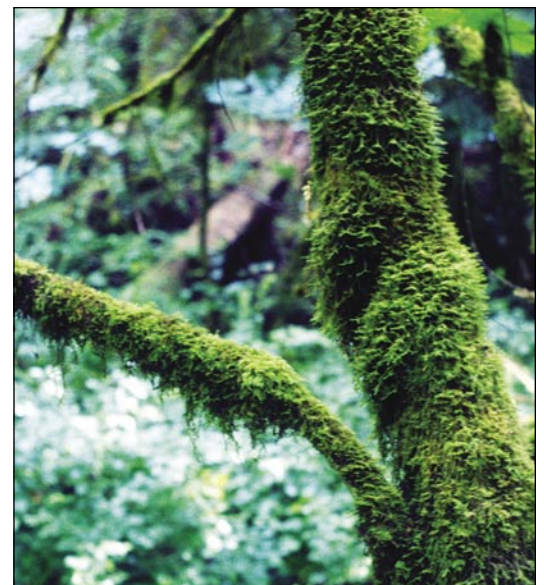


Figure 10—Moss hanging in curtains from alder trees is a hallmark of the Olympic rain forest for many visitors. Valued by florists for its decorative and water-holding qualities, the relatively slow-growing moss has become the focus of controversy between public land managers and NTFP harvesters. Public land managers are concerned that harvesters are removing moss at rates in excess of its reproductive capacity. Harvesters note that land managers lack evidence to support their claims. Photo by Kathryn Lynch.

In contrast, as of May 10, 2001, the Hood Canal Ranger District on the east side of the Olympic Peninsula no longer sells individual permits for floral greens such as salal, huckleberry, and ferns, but has gone to a new system of contracts. A notification sign posted on the front desk states that this is a permanent closure. These contracts give exclusive access to a large area to the highest bidder, whether it is a large floral greens wholesaler (known as a “brush shed”), a smaller brush shed, or an individual. The length of these contracts varies from 6 months to several years. One manager in the west end noted that the leases grant exclusive access to anywhere from 5,000 to 10,000 acres to one person for 3 years. He was concerned that this would create hardships for harvesters by reducing their relative power with brush sheds, by making them dependent on them to gain access to brush. He argued that as a public land manager he was concerned with keeping access open to all who wanted to buy a permit and harvest, and that was why they hadn’t gone to leases in the west end. He recognized, however, that there were so many harvesters in the Hood Canal area that issuing individual permits there was not cost effective.

They [Hood Canal District] decided to go that way [to leases], so now the onus is on the lessee to do the policing, not the FS. This helps, since their district is three times the size as here. Up here on the north end, we only have one or two prime brush areas, and if we lease them out, then we [would] have all these other folks wanting to pick. I like selling to the individual picker; it allows a little bit more access to the resource.

Table 3—Nontimber forest products permit conditions, Forest Service Pacific Ranger District, 2002

Permit type	Duration	Amount	Unit price	Total cost	Permits per year
Firewood	Remainder of calendar year	Min. 2 cords	\$5 per cord	Min. \$10	10 cords max.
Cedar posts/poles/ rails	14 days	Min. 20; max. 50	\$0.50 each	Min. \$10	2 permits
Other small poles	14 days	Min. 20; max. 50	\$0.50 each	Min. \$10	2 permits
Greens	3 weeks	900 lbs	\$0.05 per lb	\$45	Not limited
Moss	3 weeks	900 lbs	\$0.05 per lb	\$45	Not limited
Mushrooms	2 weeks	50 lbs	\$1.00 per lb	\$50	Not limited
Mushrooms	1 month	80 lbs	\$1.00 per lb	\$80	Not limited
Mushrooms	Remainder of calendar year	120 lbs	\$1.00 per lb	\$120	Not limited
Transplants	14 days	50 plants	\$0.20	\$10	2 permits
Cedar bark and spruce roots	Minimum need	Reasonable need	N/A	N/A	1 permit
Transplants	1 week	5 plants	N/A	N/A	2 permits
Boughs, cones, moss, greens, etc.	1 week	10 lbs	N/A	N/A	2 permits
Willow cuttings	3 weeks	10 lbs	\$0.02 per cutting	N/A	No data

N/A = Not applicable.

Although these contracts are commonly called “leases,” they are not leases in the strict legal definition of a lease. Whether these leases give ownership to the NTFP resources or whether they only constitute buying the rights to harvest NTFPs is at the core of the legal debate.

State lands—The same split in federal NTFP policy between the west and east sides of the Olympic Peninsula is visible on state lands. In the west end, the DNR office in Forks offers individual brush permits valid for 1 year. This annual permit costs \$350.00 per person and is valid for salal, huckleberry foliage and berries, swordfern, Scotchbroom, Oregongrape, moss, St. John’s wort flower, valerian, foxglove flower, boxwood, and fiddleheads of ferns. On the permit itself is a written notification that permits may be limited and sales suspended without notice owing to environmental concerns, access, or natural events that diminish the commercial quality or quantity. In addition, mushroom harvesting is no longer allowed, because mushrooms were not specifically addressed in the habitat conservation plan (HCP).

The eastern offices of DNR, including the state headquarters, put six pieces of land up for lease in 2002. Several floral-green wholesalers placed bids for these leases, including Puget Sound, Pacific Coast, Continental, Golden Eagle, Hood Canal, Superior, Zalvidar, and Country Cut. The DNR now manages about 20 to 25 active long-term

leases. They are planning to expand the amount of land under lease in the upcoming years. One land manager commented, “The result of all this, this quest for greater dollars, means that we are actually opening up a lot more land. We are going to make a lot more harvesting opportunities available.” Yet he acknowledged that it is still a question of which land management strategy—individual permits or leases—is best. He said,

We have product on the land. We need to find how we can equitably and fairly put out that product for harvest, in really the most basic way. Do we lease it? Do we permit it? How do we do it? Recognizing that this process to some extent is governed by Washington law, which tells us what we can and can't do.

When a parcel of DNR land goes up for bid, it is announced in the newspapers. By law, the DNR must also make a public notice in the county where the sale will proceed. In addition, they maintain a mailing list of people who have requested notification of upcoming bids. According to one manager, that mailing list is growing all the time.

Industrial timberlands—The major private industrial timber companies on both the west and east end of the Olympic Peninsula also have moved to a lease system for managing salal, although one company was still offering individual permits at \$2.50 per acre. The timber company, however, requires permit holders to fulfill the following requirements:

- Conform with all United States and Washington state farm labor laws that apply, including the Migrant and Seasonal Agriculture Worker Protection Act (MSWPA) and Washington State Department of Labor and Industries' Washington Farm Labor Contractor Statute (RCW 19.30).
- Provide a copy of current auto insurance policy.
- Furnish a Washington State Labor and Industries Industrial Insurance account ID number.

Permits are issued to individuals, and only their spouse and minor children can be included on that permit. Other family members must obtain their own permits. However, the company's NTFP manager occasionally grants exceptions to harvesters on a case-by-case basis. In regard to leases, unlike the federal and state land managers, the private timber companies are under no obligation to manage the land for trust, and are not obligated to share information about the bids received. Private companies typically hold a closed, sealed-bid auction in which the highest bidder gets exclusive harvesting rights to salal.

Ecological impacts of the 2002 NTFP management regime—Although some buyers praised the individual permitting system as a means to ensure access to all harvesters, others criticized land managers for overpermitting areas.

DNR and FS folks never get out of their cars, never get off the blacktop to check things out. They give permits to folks for land that doesn't even have salal on it. They say they give out permits only to a certain number, but they have no idea what the land capacity or production is to be able to decide.

Several harvesters referred to the combined impacts of reduced access and over-harvesting, noting that sometimes they would go out early in the morning and be unable to find enough salal to make enough money to cover costs. Brush packers in

the sheds also noted that as more and more pickers worked an area, the quality of the product they received declined. One noted that, in desperation, harvesters would pick anything, brush with spots or holes, which would then get thrown out because it was not of commercial quality. Another mentioned that as word spread through family networks about the brush jobs on the Olympic Peninsula, more and more people were arriving to harvest, but there was not enough salal to go around. Since we were interviewing at the end of the harvesting season, this might have been truer than at other times of the year.

Garbage and gates—Concerns about garbage were common to all land managers. State, private, and federal managers we talked with noted that putting up gates and shifting toward the use of exclusive leases rather than nonexclusive permits helped decrease illegal dumping. One buyer noted that too much garbage was dumped out in the forest, but argued that townspeople had dumped it rather than pickers. According to another buyer, concerns about dumping have prompted landowners to erect more gates, thus reducing access to land. He stated,

The FS guy said dumping of garbage was out of control and that they don't have the staff to deal with it, since they are all dealing with cedar theft issues. So that is why you get gates.

Various land managers indicated that leases have improved the situation by making one individual (the lease owner) responsible for ensuring that no garbage is dumped. Law enforcement officials noted that this makes their job significantly easier. From our own observations, we noted that at least some harvesters have a “no littering” ethic. For example, the harvester we accompanied to the field had a box of recyclable cans in the back of his van. In addition, his son who accompanied us to the woods told us that garbage we saw in the streams along the way was bad, indicating that the driver is passing his “no littering” ethic on to his children.

Labor and Industries Issues

One of the most visible changes in the NTFP management environment since the phase I study is the emergence of a heated debate surrounding the applicability of Labor and Industries (L&I) regulations in the brush industry. At the heart of this debate is whether the buying sheds that purchase contracts—and then offer permits to harvesters to work that land—are employers or not (Jefferson Center 2002). Likewise, the responsibilities of the crew leaders under L&I regulations are being debated (Jefferson Center 2002). The implications of these determinations for the different stakeholders are complex and not fully understood. The following paragraphs outline the basic contours of the NTFP labor policy debate.⁹

The six largest wholesalers of floral greens in the area (Cascade Floral Products, Continental Wholesale Florists, Hiawatha, Hood Canal Evergreens, Pacific Coast Evergreens, and Puget Sound Evergreens) argue that they are not employers. In fact, the permits these companies sell to harvesters contain the following disclaimer:

⁹A report issued by the Jefferson Center (2002) provides an overview of the history and discussion of the labor policy debate taking place within the floral greens industry on the Olympic Peninsula. Documents regarding Case 01-2-00877-7 heard by the Washington State Superior Court also shed light on the buying companies' perspective on this labor issue.

This permit is sold to the harvester for the purposes of harvesting evergreen products from designated locations stated on the permit. The harvester has the choice and right to sell evergreen products to any buyer he or she selects. The harvester is NOT an employee of the permit seller, and therefore agrees to pay all necessary payroll taxes or government imposed charges due the Internal Revenue [Service and] State Department of Revenue for the business and occupation tax or other obligations to said department, the Washington State Department of Labor and Industries, and the Washington State Department of Employment Security.

In addition, these companies have united to file a complaint for declaratory judgment regarding whether floral and brush packinghouses are “employers” for industrial insurance purposes. The companies deny that there is an employer-employee relation, noting that brush harvesters are free to sell their product wherever they choose. They also argue that they are in the business of processing, not harvesting, greens. Worker advocates and others argue that harvesters must sell the brush they harvest to the sheds that issued the permit if they desire to keep obtaining permits from those sheds.

The brush sheds have argued that they believe the van drivers (or raiteros) are acting as farm labor contractors and should therefore be responsible for paying state and federal taxes and workers compensation insurance for their work crews. They note that by legal definition, a farm labor contractor hires people to do agricultural or forest work. Some raiteros respond that the sheds are hiring them and their crews to harvest brush off their leased land, and therefore the sheds should be paying the taxes and insurance.

Smaller sheds—even those that were too small to effectively compete for state, federal, and private leases or contracts—were also concerned about the L&I issue. They pointed out that it would be unfair to consider them to be employers and force them to pay workers’ compensation and taxes, because the FS and DNR also issued permits, but were not considered to be employers.

One representative for a large timber company active in the region noted that because brush harvesting is manual labor that does not require specialized knowledge (which refers to specific L&I language), harvesters should be considered employees of the company that holds a lease. He noted that the brush sheds are in a position of power over harvesters. Although the permit may have a disclaimer (in English, which many of the harvesters cannot read) to the contrary, in reality, harvesters must bring their brush back to the company that provided the permit. Several harvesters and buyers at smaller sheds also pointed this out. One buyer mentioned that the length of the permit has been shortened and that if the harvester does not bring his or her products to the company that issued the permit, the company will not let the harvester renew his or her permit. One land manager knew of harvesters who had been threatened by the buying shed from whom they had obtained sublease harvesting rights, that if they did not bring their brush back to the company, they and the rest of their extended family working in the region would not be able to obtain permits to harvest on their lease. Likewise, several harvesters shared stories of workers who were told by buying shed representatives that if they were to make an insurance claim in the event of an injury, they and their families would no longer be able to find work in the region.

Several land managers, who now require lessees to show proof of L&I compliance, noted that the L&I controversy has cooled brush shed owners' interest in their leasing programs. One manager commented:

They're afraid of the labor laws. Having to pay L&I insurance... they don't want anything to do with that. It would be an administrative nightmare for some of them.

Another manager noted his belief that the buying sheds needed to understand that they are working in a different business environment now than they were two decades ago:

But that [L&I] is a business practice. This industry has evolved from kind of a cottage industry, and it still has that mentality, but yet it is hundreds of millions of dollars in business.

Most stakeholders expressed the view that the L&I controversies have only just begun. They noted that the United States Department of Labor and the Washington State Department of Labor and Industries are investigating the situation, and it will likely be years before the issues are settled.^{10 11}

American Indian tribes have remained peripheral in the L&I debate. For example, one tribal member said that the L&I controversy was not an issue for them yet, but that in their perspective the movement within the NTFP industry toward employing people was a positive step and good practice, since selling on a commission basis led to over-harvesting and other harmful harvesting practices.

Funding Cutbacks

During the past decade, the FS and the DNR have faced the challenge of how to survive with lower timber revenues than in the past. The Knutson-Vandenberg portion of timber receipts traditionally funded the FS nontimber forest products activities. Since 1994, timber revenues and staffing levels have fallen precipitously. Forest Service employees noted that simultaneously the resources available to administer their nontimber forest products programs have declined, even though such programs provide an alternative income stream.

In addition, revenues generated from NTFP sales locally are sent to the General Treasury, and then disbursed rather than returning directly to the local ranger districts and national forests. As one manager noted,

¹⁰Falling within the jurisdiction of the U.S. Department of Labor are workplace safety and health, wages and work hours, equal employment opportunity, and protection of agricultural and foreign workers among other items. Please see <http://www.dol.gov/dol/compliance/compliance-majorlaw.htm#agworkers> for more information. The Washington State Department of Labor and Industries is responsible for regulating and enforcing state labor laws, including the Farm Labor Contractor and Industrial Insurance and Workers' Compensation laws. For more information, please see the Jefferson Center Bulletin 4, 2002.

¹¹On December 6, 2002, Mason County Superior Court Judge James B. Sawyer, II, issued a judgment supporting the floral greens companies' argument that pickers did not fit the legal definition of employee (Capital Press 2002).

Last year, between firewood and salal, we did over \$24,000 to \$25,000. So, it's a pretty good source of revenue for the FS.... [However], that money goes back into the National Treasury. It would be nice if it stayed here, it would allow us to run the program.

He emphasized that there is an increasing need to manage nontimber forest products as the industry grows and places more pressures on the resource, and that the revenue generated by permits could be used to hire a person dedicated to nontimber forest product management.

Several FS managers noted that the reduction in budget and staff available for the administration of the nontimber forest products program has been a primary motivation for the agency's shift from individual permits to contract or lease systems. They explained that contracts are easier and more cost effective to administer.¹²

The DNR also is facing serious budget constraints. A DNR manager describes one impact of these budget cuts:

Some of the problems we've had, because we have had to scale back with our funds, is in the past 5 or 6 years I have done our lease information on our permits in Cambodian, Vietnamese, Laotian, Thai, Korean, and Spanish. And we scaled back to Spanish only this year. And it is possible we will scale back to less than Spanish this next year, I can almost guarantee it. Not by choice.

Federal, state, and tribal law enforcement officers all noted the challenge of tight budgets, and drew attention to the small numbers of officers and the large territories they were responsible for patrolling. One law enforcement officer also observed that issues like murder, theft, drugs, and child abuse took priority over nontimber forest product permit and lease violations.

Tribal Rights

The Olympic Peninsula is home to the Makah, the Quileute, the Hoh, and the Quinault Nations, whose ancestral lands and current reservations are found on the western end of the Olympic Peninsula. Tribal law governs harvesting of nontimber forest products on the reservations, and the rules and approaches differ greatly among tribes. In all cases, however, harvesting rights are reserved for tribal members. Most tribal harvesting taking place in 2002 appeared to be for subsistence, cultural, or spiritual uses rather than for commercial sale. This is changing for some tribes, however, such as the Makah, who have recently embarked on a project to develop a viable NTFP industry on their reservation.

Managers tasked with developing and implementing land management strategies on tribal lands face several challenges. First, they point out that not all reservation land is held in trust by the tribe or by individual tribal members in allotments. Within their reservations, private ownership by nontribal people fragments the land and presents barriers to land management strategies on the landscape level. Although outsiders hold only 2 percent of the Makah reservation, the Quinault face much greater fragmentation.

¹²One researcher we talked with pointed out that the move toward offering large leases for nontimber forest products is unsurprising and not necessarily exclusively the result of funding cutbacks, given the agency's history and familiarity with bidding out large tracts of land for timber extraction.

Second is the issue of fragmented ownership of individual parcels. A member of the Makah explained that within the reservation, there might be a 10-acre parcel with up to 100 owners. This means that to pursue any type of land management, be it logging, thinning, or harvesting nontimber forest products, consensus of at least 51 percent of the trust owners is needed.¹³

As discussed in Chapter 3, many tribes signed treaties that reserved gathering rights on their “usual and accustomed” grounds. Usual and accustomed lands cover large portions of the Olympic Peninsula and include a mosaic of federal, state, and private lands. As Goodman (2002: 274) describes, the legal foundation for recognition and protection of off-reservation reserved rights stems from the 1905 U.S. Supreme Court decision *United States v. Winans*. The court stated that treaties did not involve a grant of rights from the federal government to the Indians but were rather a grant from the Indians to the federal government. These treaties thus reserved to the signatory tribal nations those rights not granted to the United States by the treaty (Goodman 2002: 274). This principle has been repeatedly upheld in the courts. Likewise, the courts have consistently recognized that states do not have the authority to apply state natural resource regulations to tribal members, unless necessary for the conservation of species (Goodman 2002: 276).

Although reserved rights to gather nontimber forest products have not stirred as much controversy as reserved rights to wild fish and game, they are at the center of an emerging dialogue between land managers and tribal members. The central issue appears to be the motivation for harvesting—whether it be for cultural practices, personal use, or commercialization. Several public and private land managers noted that treaty rights permit the harvesting of products for cultural uses, such as alder wood for smoking salmon. However, the managers did not believe that treaty rights included personal use or commercial harvesting. According to one public land manager, the big issue concerned firewood. He stated,

We are talking about this issue right now and it is a big mess. We have four tribes here, with free use for customary use. But now there is conflict between different users, and it is a law enforcement nightmare. Are they picking to sell? ...How far do their rights extend?... Just last week had some guy asking about this issue, regarding firewood [to heat his home]. The price for a permit is only \$10 for two cords and so he just ended up paying for it.

Land managers were concerned that if the courts ruled that tribal members have reserved rights to nontimber forest products for personal use (such as firewood to heat their homes), or for commercial sale, such a decision would create tension and hostility between nontribal people and tribal members, and increase the difficulty of their jobs as land managers. As Goodman (2002: 277) notes, determining allocation rules in situations of scarcity has been a major legal battle in the exercise of off-reservation rights. Although this issue remains minor at the study site, most land managers said they believe it would continue to surface and would require further discussion, study, and possibly litigation to settle.

¹³Federal regulations currently state that 51 percent of the trust interest must provide consensus before any action can be taken. Since Indian land is held in trust, and land held by nontribal members is out of trust status, this new ruling alleviates the problem of tracking down nontribal people who are no longer on the reservation in order to make management decisions.

The phase II interview data indicated that the size of a tribal member's reservation is the primary determinant in whether or not a tribal member seeks to exercise off-reservation rights. State, federal, and private land managers noted that Makah and Quinault tribal members rarely sought to exercise their off-reservation rights. Both tribal nations have large reservations that provide many of their nontimber forest products needs. In contrast, state, private, and federal managers stated that members of the Quileute and Hoh Nations approached them frequently for access to NTFPs for cultural and personal use. The Quileute and Hoh Nations have extremely small reservations and thus must look off reservation to meet their NTFP resource needs.

The Quinault and the Makah also have experimented with expanding commercial NTFP harvesting on their reservations. The Quinault have explored commercialization of NTFPs from their lands through a variety of pilot programs, including development of a guide to nontimber forest products and a project that encouraged commercial bough harvesting. The bough harvesting experiment stopped in response to tribal complaints that an outside contractor had failed to follow sustainable harvesting guidelines.

The Makah have recently initiated a 5-year demonstration project aimed at fostering a culture of forest resource stewardship, developing sustainable forest resource management practices, and creating sustainable forestry-based livelihoods, focusing primarily on nontimber forest products (Makah Forestry 2001: 2). The Makah Forestry plan reads, "The Makah Tribe has identified nontimber forest resources and value added products as the most promising approach in the planning and development of a new Tribal enterprise" (Makah Forestry 2001: 1). In this project, they are seeking to work with tribal carvers, basket weavers, and artists and are exploring ways to develop a limited number of selected value-added products made from floral greens, mushrooms, and edible plants such as berries, for the local and Olympic Peninsula markets (fig. 11). One tribal land manager noted:

The membership would be glad not to log if had other options...if we can show that NTFP harvests can pull in as much money. Like in Alaska, there are areas they don't harvest [timber] because they make more money harvesting cones. We need more demonstration projects, to try to document this. I mean look in the deli section! Have you seen how much a small container of pine nuts costs!

Gender and Ethnic Issues

As an analytical tool, gender and ethnic analysis helps policymakers understand the socially constructed roles and responsibilities that define our relationships to one another and to our natural environment. Researchers working internationally have found gender analysis to be critical for understanding resource use and management (March et al. 1999, Moser 1993, Parker et al. 1995, Schmink 1999). Scholars of environmental justice also have noted the importance of analyzing patterns of differential access to resources along ethnic lines (Brosius et al. 1998, Mutz et al. 2001). Therefore, even though a detailed gender and ethnicity analysis of the brush industry was not the central focus of this research, it was useful for illuminating some previously hidden impacts of NTFP policy, particularly given the diversity of cultural groups involved in the brush industry and the complex relationships between these different groups.

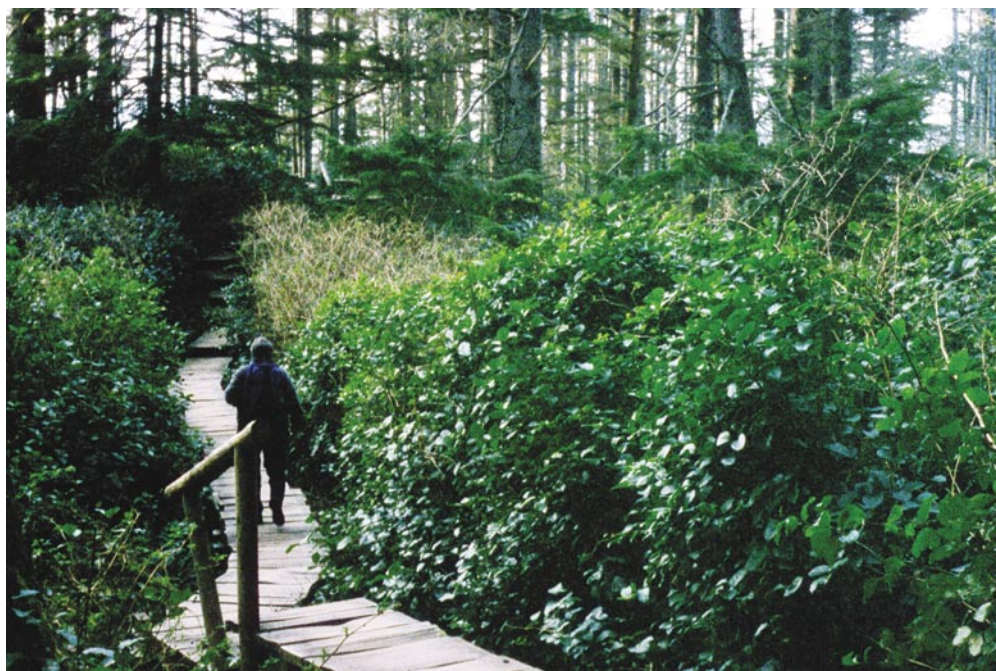


Figure 11—In areas closed to commercial harvesting, salal bushes can grow to heights of 6 feet or more. In 2002, the Makah Nation embarked on a program to develop its capacity to sustainably manage and market salal and other nontimber forest products. Photo by Kathryn Lynch.

The foundation of any gender or ethnicity analysis is developing an understanding of who does what, when, and where. This facilitates an analysis of differential access to and control of resources, time allocation issues, and power relationships. In phase II, we found that within the brush industry on the Olympic Peninsula, young Latino men were the predominant harvesters of salal. The few women involved in the brush harvest worked in teams with their husbands or extended family members. Interviews with Latina harvesters revealed that they participated in harvesting only to meet dire and immediate economic needs of their household. These women categorized harvesting brush as a job of last resort, noting that harvesting required long days of hiking over difficult terrain, trying to keep up with the men in the team, usually in wet and cold weather, and often carrying heavy bundles of brush.

Van drivers were exclusively Latino men. As noted earlier in this chapter, van drivers often were more experienced harvesters who had been in the country longer, spoke some English, understood the permitting and legal system, and had been successful enough to buy a van. Frequently the driver handled the acquisition of permits for “his crew,” which might include anywhere from 2 to 15 people. One researcher noted that on the southeastern part of the Olympic Peninsula, a raitero might coordinate several crews, sometimes up to 40 or 50 men. The drivers had substantial power, because other harvesters needed their services. They could thus extract payment for their services. Because they controlled where they dropped off and picked up harvesters, drivers also influenced harvesting patterns on the landscape.

White men owned most of the buying sheds, although a few Latino men had started to engage in buying operations. Latina women were most visible in buying sheds, working as buyers, cleaners, and packers of brush as well as in administration. These

Discussion of Phase II Findings

women said they preferred the jobs in the sheds, because the hours were more flexible, the work easier, and the pay better.

Conversations with these stakeholders revealed another important dichotomy that warrants further study. It appears that the younger harvesters who were single or who had left their families behind in Latin America were more mobile than the harvesters with families that were in the United States. This meant they often traveled throughout the region to maximize their earnings, often switching from the brush industry in the winter and spring to agricultural labor in the summer. Harvesters, buyers, and land managers alike implied that this leads to a lesser concern for the ecological and social impacts of their harvesting practices in any one location, and that migrant harvesters were more willing to take risks in order to maximize their income, including harvesting illegally.

In contrast, the harvesters with families living with them in the United States noted that they were interested in staying in their community rather than migrating with the seasons. They discussed their ability to develop long-term relations with buying sheds, local communities, and the ecosystem itself, which increased their ability to earn a more steady income.

In 2002, the need to “level the playing field” between the buying sheds that follow labor and tax laws and those that don’t was by far the most visible concern of public and private land managers, small buying sheds, advocacy groups, and researchers. This concern centers on the fact that sheds that decide to “be legal” by keeping accurate permit records and upholding fair labor practices cannot compete against sheds that do not. This has led to increased hostility between sheds and among different stakeholder groups. The spread of the use of exclusive leases to include most private industrial land, state land, and some federal land has exacerbated the conflict by consolidating land access in the hands of the few larger companies who have enough capital to successfully compete for leases. High bids have forced smaller companies out of the running, resulting in accusations from harvesters and smaller sheds that the larger companies are colluding to gain control over the supply of brush. Harvesters complain that the concentration of leases in the hands of a relatively small number of companies has decreased their ability to compete in the marketplace because they no longer have the freedom to sell their products to the sheds offering the highest prices. The power differential between the large buying sheds and the harvesters is compounded by the fact that many harvesters lack legal work documents and thus are unwilling to speak out against the sheds for fear of being deported. However, both buyers and management recognize that the brush industry would be in serious trouble if it didn’t have this undocumented, and consequently low-paid, workforce.

An issue brought up by harvesters and land managers alike was the threat by several companies to move their processing operations to Canada if the court rules that the buying sheds are employers and thus responsible for complying with L&I rules. One manager said,

Well, when you get right down to it, the greens are a multibillion dollar industry. The one thing is that when they try to organize the pickers for workman’s comp and stuff like that, Hiawatha and Continental are threatening to move their operation out of the U.S. up to Canada, which would be a big loss to Shelton. They may buy it down here, but process it in Canada.

This could mean the loss of a significant number of jobs for brush packers, as well as a loss in business tax revenue to municipal, county, and state governments. One manager who works with Canadian counterparts, however, suggested that it might not be so easy for these companies to move to Canada. This is something to watch as the legal proceedings regarding the L & I issue develop.

The controversy over employee status has led social justice organizations, such as the Jefferson Center and the National Employment Legal Project, to pressure the Department of Labor and Industries to enforce existing regulations governing the nature of the legal relation between buying sheds and harvesters. Literacy campaigns have simultaneously provided workers on the southeastern part of the Olympic Peninsula with better access to educational, legal, and business assistance. Harvesters come from diverse geographical regions and cultural backgrounds, however, and are by no means a homogenous cultural group. As a result, efforts to convince harvesters to work collectively in support of more rigorous enforcement of existing labor laws have had limited success.

The labor policy controversy is exacerbated by the trend for public and private land managers to move toward exclusive access systems, such as leases put up for public auction. Our analysis suggests that such systems may favor more highly capitalized floral greens companies, depending on whether the harvesters who pick the product have real possibilities to sell elsewhere or not. If this analysis holds true, the next few years are likely to be a period in which sheds consolidate, with some of the less extensively capitalized sheds going out of business or becoming intermediaries for bigger companies. Such consolidation likely would reinforce the existing power inequities between harvesters and buying shed companies. We also identified several attempts by harvesters to increase their economic power relative to the sheds by creating either associations for organizing workers (i.e., Alliance of Forest Workers and Harvesters) or producer associations (i.e., the Northwest Harvesters Association) in which members negotiate with state and federal agencies for exclusive rights to NTFPs on large areas.

Comparison of Phase I and Phase II Findings

One of the most visible striking changes between the 1994 and 2002 data was the shift in picker and buyer perceptions of permits. In 1994, the rising cost of permits, as well as the institution of permits in areas that previously had been accessible without permits, constituted one of the key points of tension in the NTFP arena in the west end. By 2002, most harvesters were much more accepting of the permit system and fee structures. Harvesters noted that they could make \$70 to \$100 in a typical good day, and most felt the permit prices were reasonable. One crew leader noted that the main reason harvesters were not obtaining permits was because they were undocumented and afraid of being deported, rather than because they felt that the price of the permit was too high. In 2002, picker complaints centered upon the lack of permit enforcement and on the uneven playing field created by companies who do not pay L&I taxes and who knowingly purchase product from harvesters lacking permits. Pickers stated that these practices have encouraged companies to rely increasingly for product upon underpaid, undocumented harvesters whose illegal status places them in a much more precarious bargaining situation vis-a-vis the brush sheds than harvesters who are citizens or have legal documents to work in the United States.

The data gathered during phase I identified the emergence of a trend toward professionalization of harvesting, with a concomitant decline in access opportunities for part-time pickers. The phase II data indicate that this trend intensified over the succeeding

8 years, resulting in a situation in 2002 in which full-time seasonal pickers, instead of part-time pickers, constituted the vast majority of people obtaining permits from federal, state, and private industrial land managers. Additionally, the phase II data suggest that the entrance of a high percentage of undocumented workers into the floral greens workforce has transformed the floral greens industry from an industry dominated by self-employed, relatively independent harvesters to an industry in which most harvesters work for wages on crews run by raiteros.

Chapter 6:

Conclusion and Management Applications

Utility of the Study Methodology

The longitudinal rapid rural appraisal method used to conduct the field portion of this study proved useful for identifying and describing the key elements of policies governing access to NTFPs on state, federal, tribal, and private industrial timberlands on the western Olympic Peninsula. In addition, we were able to develop a fairly detailed understanding of the ongoing labor controversy that has generated considerable tension within the floral greens industry since the late 1990s. The method also worked well for identifying differences between stakeholder perceptions of the effects of NTFP policies on pickers and buyers. The analysis of these differences in perceptions from the 1994 data indicated that a large gap exists between how managers perceive the effect of NTFP rules and how pickers and buyers perceive those effects.

The method is less useful for assessing actual effects of NTFP rules on livelihoods, primarily because the short timeframe does not permit extensive cross-checking of interview data. We also found that the method is poorly suited to studying knowledge flows among and between stakeholders, again because the short timeframe does not permit the researchers to cross-check data adequately. We thus recommend that future researchers use a longer term, multisited ethnographic approach to further our understandings of the sociopolitical dynamics that shape labor relations in the NTFP sector and the consequences of those relations on the long-term sustainability of floral greens harvesting on the Olympic Peninsula.

Applications of the Study to Floral Greens Management

The study has several practical implications for forest managers and policymakers:

- The phase II data demonstrate that considerable heterogeneity exists within the floral greens industry. The most common labels used to categorize NTFP stakeholders (i.e., “picker” and “buyer”) obscure the diversity within these categories and leave out other important NTFP stakeholders, such as drivers, field buyers, transporters, packers, and processors.

The category “picker,” for example, is far from homogenous: pickers belong to a variety of ethnic groups (even within the Latino picker population there are multiple ethnic groups). Some pickers are in the country legally, whereas others are undocumented. Pickers also differ greatly in terms of their age, their experience in the woods, and the amount of time they spend picking floral greens over the course of the year. In addition, some of the pickers are also drivers, and thus exercise a much different level of control over resource access than the pickers whom they transport.

Likewise, the sheds (or “buyers”) are not a homogenous category. Sheds range from very large operations with dozens of employees to one- or two-person operations with no employees. Some of the sheds have leases, and thus are able to exercise greater control over the product supply than sheds that don’t have leases.

Understanding the heterogeneity of the floral greens sector is important, as policies may have differential effects on each of these subcategories. If managers wish to develop effective policies, they will need to have a better understanding of the social and political complexities that characterize the floral greens industry.

- Our analysis of changes in floral greens policy and related labor and resource tenure structures indicates that labor policy likely will play a key role in whether sustainable NTFP management systems develop on the Olympic Peninsula. Our study reveals that a significant transformation in the NTFP labor force occurred between 1994 and 2002, with an older, more experienced workforce being replaced by a labor force in which single young Latino males constitute a large percentage of the picker population.

This shift appears to be linked to labor policies that favor the use of undocumented Latino males as the primary source of labor in the floral greens industry. The current labor system also appears to provide incentives for rapid worker turnover, with a subsequent decline in the stock of ecological knowledge within the harvester population as a whole. To address these issues, forest managers and policymakers will need to acquire better understanding of how labor relations can affect forest sustainability. For example, it may be the case that the answer to some of the concerns forest managers have about ecological sustainability may lie in supporting the development of appropriate labor policies, rather than in restricting access to resources.

- This study indicates that tensions exist over tribal access to NTFPs off reservation, for subsistence, ceremonial, and commercial use. The state and federal agencies, as well as the private industrial timberland manager interviewed in the west end, currently provide tribal members access to NTFPs used for ceremonial and subsistence purposes. What remains unclear, and untested in the courts, is whether members of signatory tribes to the 1855 Neah Bay and Quinalt River Treaties also have (as yet unexercised) valid claims to NTFPs on their usual and accustomed gathering grounds for commercial purposes.

Precedents in the fishing and shellfishing sectors, in which the courts have determined that similarly worded reserved rights with respect to fishing include commercial harvesting rights as well as subsistence and ceremonial use rights, suggest the strong possibility that signatory tribes could make a successful claim for commercial NTFP harvesting rights. This possibility is further strengthened by anthropological evidence that the signatory tribes traded such commodities extensively at the time of European contact. Forest managers and policymakers thus need to anticipate the likelihood that they may need to revise current policies regarding NTFP harvesting restrictions for members of tribes signatory to the Neah Bay and Quinalt River Treaties.

Chapter 7:

Recommendations for Future Research and Outreach

The following list provides recommendations for future research and outreach in the NTFP policy arena. It also gives suggestions for steps that public land managers can take to incorporate the knowledge and concerns of harvesters and buyers into NTFP policy decisions.

- **Biological and Ecological Research.** Land managers agreed that more data on the biological characteristics of harvested species and their ecological relations are needed to better manage the floral greens industry. Several recommended setting up blind test plots throughout the Olympic Peninsula in order to measure reproduction rates under different treatments. Variables to be controlled include management regime (leases, permits), the number of harvesters on a plot, and harvesting techniques, among others.
- **Social Science Research.** Understanding the biological and ecological characteristics will be insufficient without a better understanding of the economic, political, and cultural factors that drive harvesting of nontimber forest products. Support is needed for ethnographic research that will help provide a clearer picture of the social, political, and economic processes that influence the floral greens industry structure and the ecological consequences of that structure. This research, in turn, can be used to support the development of labor and resource access policies that are more conducive to sustainable NTFP harvesting.
- **Education and Training for Land Managers.** As one land manager noted, “I am a forester, I was never taught to cruise fern. So we need to learn these things.” Training that takes managers out into the forest with harvesters might be particularly valuable in providing managers a better understanding of the constraints and realities faced by harvesters and might help improve relationships between managers and harvesters. Routine “field trips” with harvesters, in which harvesters have the opportunity to share their knowledge and experiences, might be one way to strengthen this dialogue and provide critical data to the managers necessary for setting policy.
- **Education and Training for Harvesters.** On the Makah Reservation, there is an effort to teach not just how to harvest, but also to instill values so that participants in the program embrace a sustainable harvesting ethic. One Makah planner summarized their approach as follows:

We are trying to reach younger kids to explain why we are doing what we are doing. This [harvesting NTFPs] could provide kids with something to do. So we are trying to recruit them into the program, to show them how to do these things.

Developing similar efforts to include harvesters from other ethnic backgrounds is highly recommended. Social science research would be particularly useful for determining the most culturally appropriate ways to reach the full diversity of harvesters involved in the floral greens industry. Such research could build upon work that

the Northwest Natural Resources Group has already started in developing training and educational programs aimed at Latino harvesters.

- **Improved Inventory.** Developing a systematic and scientific inventory process would help alleviate the problem of overpermitting and ensure that the product being permitted is actually found on the land specified on the permits. We recommend that land managers explore ways to include harvesters and buyers in this process of inventorying and monitoring in a more formalized and systematic way, not only to improve the data sets from which they work, but also to improve their relationships with harvesters and buyers.
- **Improved Monitoring.** Exploring how to incorporate harvesters into on-the-ground monitoring efforts—especially given budget and personnel reductions in state and federal agencies—is recommended. Harvesters are out on the ground and could be a valuable ally in the pursuit of sustainable and equitable nontimber forest product management.

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Metric Equivalents

English to metric

- 1 inch (in) = 2.540 cm
- 1 foot (ft) = 0.305 m
- 1 acre (acre) = 0.405 ha
- 1 mile (mi) = 1.609 km
- 1 pound (lb) = 454 g

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Appendix 1: Common and Scientific Names of Plants

Common name	Scientific name
Beargrass	<i>Xerophyllum tenax</i> (Pursh) Nutt.
Bolete	<i>Boletus edulis</i> Bull.:Fr.
Brackenfern	<i>Pteridium aquilinum</i> (L.) Kuhn
Cascara	<i>Rhamnus purshiana</i> DC.
Deer fern	<i>Blechnum spicant</i> (L.) Sm.
Devil's club	<i>Oplopanax horridus</i> Miq.
Douglas-fir	<i>Pseudotsuga menziesii</i> (Mirb.) Franco
Dwarf Oregongrape	<i>Mahonia nervosa</i> (Pursh) Nutt.
Evergreen huckleberry	<i>Vaccinium ovatum</i> (Pursh)
Foxglove	<i>Digitalis purpurea</i> L.
Morel	<i>Morchella</i> spp.
Noble fir	<i>Abies procera</i> Rehd.
Oregon boxwood	<i>Pachistima myrsinites</i> (Pursh) Raf.
Oregon wood-sorrel	<i>Oxalis oregana</i> Nutt.
Pacific silver fir	<i>Abies amabilis</i> Dougl. ex Forbes
Port-Orford-cedar	<i>Chamaecyparis lawsoniana</i> (A. Murr.) Parl.
Red huckleberry	<i>Vaccinium parvifolium</i> Sm.
Salal	<i>Gaultheria shallon</i> Pursh
Scotchbroom	<i>Cytisus scoparius</i> (L.) Link
Sitka spruce	<i>Picea sitchensis</i> (Bong.) Carr.
St. John's wort	<i>Hypericum perforatum</i> L.
Tall Oregongrape	<i>Berberis aquifolium</i> Pursh
Tanoak	<i>Lithocarpus densiflorus</i> (Hook. & Arn.) Rehd.
Valerian	<i>Valeriana</i> spp.
Western hemlock	<i>Tsuga heterophylla</i> (Raf.) Sarg.
Western redcedar	<i>Thuja plicata</i> Donn ex D. Don
Western swordfern	<i>Polystichum munitum</i> (Kaulf.) K. Presl
Western white pine	<i>Pinus monticola</i> Dougl. ex D. Don

Source: Natural Resources Conservation Service PLANTS database. <http://plants.usda.gov>.

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