

Workshop Guide and Proceedings: Harvester Participation in Inventory and Monitoring of Nontimber Forest Products

Facilitated by the Institute for Culture and Ecology
Funded by the National Commission on Science for Sustainable Forestry

Compiled by Kathryn A. Lynch, Ph.D.
Institute for Culture and Ecology
www.ifcae.org

March 2004

Meeting Locations

October 17, 2002 – Denver, CO
February 27, 2003 – Atlanta, GA
April 4, 2003 – Pittsburgh, PA
September 4, 2003 – Portland, OR
September 8-11, 2003 – Silver Falls, OR

Abstract

This document is both a guide for planning a multi-stakeholder workshop and the proceedings for a series of workshops and a retreat held by the Institute for Culture and Ecology, in 2002-03. The workshops brought together land managers, policy makers, scientists, harvesters, buyers and other nontimber forest product (NTFP) stakeholders to explore how harvesters might be included in biological inventory and monitoring efforts. The workshops took place in Denver, Atlanta, Pittsburgh, Portland, Oregon and Silver Falls, Oregon. These workshops were a component of a larger national research project funded by the National Commission on Science for Sustainable Forestry that explored the linkages between forest management, nontimber forest products and biodiversity conservation. Part One of this document provides an overview of the planning process used to develop the workshops. We share our specific experiences with these particular workshops, as well as illustrate key questions to address when developing participatory workshops or meetings. We hope that by sharing our experiences with the often-invisible process of planning that this first section will be a useful guide for those interested in workshop planning and facilitation skills. Part Two then presents detailed summaries of each regional workshop, including the workshop announcements, agendas, participant lists, focus group flipchart transcripts, plenary discussions, and workshop evaluations. Where we have information from case study presentations, we include that as well.

TABLE OF CONTENTS

Abstract	1
Acknowledgements	4
Introduction	5
PART ONE: Workshop Guide	5
Workshop Planning	5
Step One: Defining the Objectives	6
Step Two: Identifying Who	7
Step Three: Determining When	10
Step Four: Determining Where	10
Step Five: Determining Why (Learning-needs Analysis)	12
Step Six: Determining What (Content)	13
Step Seven: Identifying How (Methods)	14
Role of the Facilitator	16
Evaluation	17
Post-workshop Review Process	18
National Retreat	18
Conclusion	19
References and Notes	19
PART TWO: Workshop Proceedings	21
Western Region Workshop	
Workshop Announcements	22
Agenda	24
Participant List	25
Morning Small Group Work: Identifying Issues and Needs	27
Afternoon Small Group Work: Inventory and Monitoring Pilot Projects	34
Final Discussion	41
Workshop Evaluations	42
Southeastern Region Workshop	
Workshop Announcements	45
Agenda	46
Participant List	47
Morning Small Group Work: Identifying Issues and Needs	49
Case Studies	54
Afternoon Small Group Work: Inventory and Monitoring Pilot Projects	55
Final Discussion	62
Workshop Evaluations	63

Northeastern Region Workshop	
Workshop Announcements	67
Agenda	69
Participant List	70
Morning Small Group Work: Identifying Issues and Needs	72
Afternoon Small Group Work: Inventory and Monitoring Pilot Projects	80
Final Discussion	87
Workshop Evaluations	95
Pacific Northwest Region Workshop	
Workshop Announcements	99
Agenda	101
Participant List	102
Preliminary Project Findings	106
Morning Work: Case Study Presentations	112
Afternoon Small Group Work: Harvester Involvement in Inventory and Monitoring	115
Workshop Evaluations	126
Team Retreat	
Agenda	130
Worksheets: Inventory and Monitoring	135
Acronyms	143
Appendices	
1: Pre-workshop registration form	144
2: An example of pre-workshop registration responses	145
3: Evaluation form	151

Acknowledgements

I would like to thank the project team for their assistance in the planning process, implementation and post-workshop work. This team included IFCAE members, Eric Jones and Rebecca McLain, our regional liaisons, Maureen DeCoursey (Western Region), Sarah Workman (Southeastern Region), Marla Emery (Northeastern Region), and Tom Love (Pacific Northwest Region), and Dave Pilz (National Retreat). Thanks also go to Brian Becker, our graduate assistant in the SE who helped compile the handout on web resources regarding participatory inventory and monitoring. Without their valuable input during the planning process and willingness to give presentations, lead and transcribe focus group discussions, and many other essential project pieces, these workshops would have been impossible to pull off.

The project team would like to thank everyone who participated in the workshops, for without this willingness to engage in the dialogue and share perspectives, we would have nothing to report. We would also like to thank the National Commission on Science for Sustainable Forestry (NCSSF) for funding this work. The NCSSF is funded by the Doris Duke Charitable Foundation, Surdna Foundation, Packard Foundation, and the National Forest Foundation and is conducted under the auspices of the National Council for Science and the Environment, a non-profit organization dedicated to improving the scientific basis for environmental decision-making. In addition, we are grateful to the USDA Forest Service Regional Headquarters in both Denver and Atlanta for providing workshop facilities free of charge, and to Audubon Society's Beechwood Farms Preserve in Pittsburgh and the World Forestry Center in Portland, Oregon for discounting their facility rental charges.

Introduction

In June 2002, the National Commission on Science for Sustainable Forestry (NCSSF) awarded the Institute for Culture and Ecology (IFCAE) an 18-month, \$200,000 grant to assess the relationships between forest management practices, nontimber forest products (NTFPs), and biodiversity in the U.S. The objectives of the project were to: 1) synthesize data regarding the impact of nontimber forest products management on forest ecosystem sustainability and biodiversity; and 2) directly support the ability of U.S. forest managers to assess nontimber forest product sustainability.

To accomplish these objectives, we developed a research design that involved five interrelated components. The first component involved the expansion of our public web-based NTFP species database that is used for identifying commercially harvested NTFPs in the United States. Similarly, the second component focused on expanding our public web-based NTFP bibliographic database that catalogs references specific to NTFP conservation, policy, management, culture and ecology. The third component focused on expanding a NTFP management survey, administered to both state forestry offices and federal National Forest Ranger Districts, in order to document managers' view on how management activities are affecting biodiversity. The fourth component involved a year of anthropological fieldwork focused on documenting NTFP harvester knowledge about forest management and biodiversity issues. The fifth component and focus of this document consisted of four regional workshops and one national team retreat that explored the possibilities for and barriers to developing collaborative approaches to inventory and monitoring.¹

Part One illustrates key issues associated with the workshops but is written so as to serve as a guide to assist organizers with developing similar workshops. It provides an overview of the planning process for the four workshops, including defining objectives, logistics, content and methods. It highlights the reasoning behind the format and participatory processes used in the workshops, and takes a critical look at outcomes and lessons learned. A discussion of the national retreat and how it fit into the overall project follows. Part One was developed partly in response to inquiries and encouragement from various workshop participants, who were interested in learning more about workshop facilitation. Therefore, the section concludes with a selected reference list of publications on participatory facilitation for those who wish to pursue it further.

Part Two presents the 'raw data' from the workshops themselves, including the workshop announcements, agendas, participant lists, focus group flipchart transcripts, plenary discussions, and workshop evaluations. Where we have information from case study presentations, we include that as well. Following this section we have included a list of acronyms and a reference list of materials directly relevant to collaborative inventory and monitoring.

PART ONE: Workshop Planning

Our starting point was NCSSF's requirement of one national synthesis meeting. Based on previous meeting and field experiences we anticipated smaller, regionally-based workshops would yield better data about ecological, cultural, economic, and political diversity. Therefore, we opted to replace the single national meeting with four regional meetings followed by a 3-day intensive team retreat to discuss problems and opportunities revealed during the workshops. With this structure the workshops complemented our fieldwork in each region and ensured that the picture we were putting together in the field was accurate before we moved on to the next region. Thus the workshops functioned as an additional opportunity to document specific economic, political, cultural issues surrounding NTFPs in each region, as well as people's opinions on how these would influence collaborative approaches to

inventory and monitoring. Another advantage of the regional approach was that it made it easier for many potential participants to attend by reducing both transportation and time costs.

Our planning process followed the “Seven Steps of Planning” developed by Oxfam (William 1994:18-37). We budgeted five to eight days of planning and preparation for every workshop. Since we were offering the same workshop and using the same facilitation team in each region, we expected that less time would be needed for each subsequent workshop. However, since we were using a pre-workshop needs assessment (described below) we still allotted time for adapting the workshop materials and the agenda to the specific interests and needs of each group of participants. The following discussion describes the planning process.

Step One: Defining the Objectives

Williams (1994:18) defines objectives as “specific, measurable, achievable, relevant and time-bound” Objectives provide the foundation for any workshop and all activities are derived from this starting point. Because of the central role of objectives, defining them requires a thoughtful and often iterative process. The key is to make your objectives explicit and clear, so that when it comes time for evaluation you have a basis from which to measure the success of the workshop.

We conceptualized the regional workshops-as venues for bringing together land managers, policy makers, scientists, harvesters, buyers and other NTFP stakeholders to explore how harvesters might participate in biological inventory and monitoring programs. Although the specific wording of the objectives varied for each workshop depending on the pre-workshop needs assessment and recommendations from previous workshops, the essence of the objectives in all four workshops were to: 1) Share our preliminary research findings for review and comment; 2) Describe various NTFP inventory and monitoring efforts that involve harvesters; 3) Discuss some of the concerns and possibilities surrounding the inclusion of harvesters in biological inventory and monitoring programs of NTFPs; and 4) Build networks with other stakeholders in the region with an interest in NTFPs.

The evolution of these overarching objectives through the course of holding the four workshops illustrates that defining objectives so that they are accurate and useful is a process of fine-tuning and not as easy as one might assume. For example, we knew from the beginning that we wanted to share our preliminary fieldwork findings for review and feedback. Reflecting this, our research strategy was to complete all (or a majority) of our fieldwork for each region prior to the regional workshop, so that we could share those findings with the broader NTFP audience from that region. We wanted to do this for two major reasons. First, we felt it was important to share our fieldwork findings, since they focused on harvester perspectives. Past experience had taught us that workshops are not necessarily the best forum to obtain harvester participation. Therefore we reckoned if we could not get harvesters to the workshop, we could at least share what we had learned during our fieldwork with harvesters. Second, we conceptualized the workshops as an opportunity to get feedback to enrich, clarify and verify our fieldwork findings. In the first and second workshops, this thinking was articulated in the objectives as: “Illustrate the need for inventorying and monitoring efforts of nontimber forest products.” Therefore, we presented preliminary fieldwork results that supported the need for inventorying and monitoring. However, participant evaluations revealed that it was not clear we were sharing our fieldwork findings. Consequently, we added the more direct objective of “Share our preliminary research findings for review and comment” in the third and fourth workshops.

Second, we knew that we wanted to illustrate how harvesters had been involved in inventory and monitoring efforts previously, since in our conversations with resource managers and policy makers there seemed to be little awareness of and/or interest in collaborative approaches. Many felt the idea was

implausible or impractical. Therefore, we hoped to illustrate that collaborative approaches are neither new nor revolutionary ideas. We wanted to show that there are some creative, successful and scientifically rigorous examples that merit attention, and that could be used as models when developing new efforts to address inventory and monitoring needs. In the first and second workshop, this was worded in the objectives as: “Discuss several strategies for including harvesters in inventorying and monitoring.” In the third workshop, we sought to make this more interactive, so reworked it to state, “Develop strategies for including harvesters in inventory and monitoring.” Thus, the presentation of the case studies was not the objective itself, but rather provided background material with which participants could build from to develop their own recommendations on how to involve harvesters. However, this proved too ambitious for a one-day workshop. For the fourth workshop we returned to the original objective: “To describe various NTFP inventory and monitoring efforts that involve harvesters.”

Describing these case studies tied in to our third objective of wanting to obtain feedback from the participants on what they perceived to be the barriers to implementing a collaborative approach and how these barriers might be overcome. We recognized that each person has different knowledge, strengths, experiences and perspectives that could contribute to the development of collaborative I & M programs. In addition, we know different groups face different constraints, and we wanted to understand these more fully. Therefore, in the first workshop we stated that we wanted participants to be able to: “Identify next steps for developing inventorying and monitoring pilots.” Implicit in this activity was identifying both the current possibilities for and barriers to moving forward with the idea. We wanted participants to identify any political, economic, cultural, or ecological barriers they perceived from their perspective as a harvester, resource manager, policy maker, etc. However, the objective proved too large and ill-defined. In the second workshop we tried to make this objective more explicit by re-stating it as: “To discuss some of the political, economic, and social issues surrounding the inclusion of harvesters in an inventory and monitoring program of NTFPs.” Feedback revealed that this was still both too broad and unspecific. By the third workshop we had narrowed the objective to: “Discuss some of the concerns and possibilities surrounding the inclusion of harvesters in an inventory and monitoring program of NTFPs” and “Develop strategies for including harvesters in inventory and monitoring.” This proved to be clear and workable and we used the same wording in the fourth workshop as well.

Finally, we realized that NTFPs are still quite marginalized within forestry, and that building networks of those people involved with NTFPs in some form or another was important. This objective was included in all four workshops and was a priority for participants as well, as revealed in their registration forms (see Step Five below).

Step Two: Identifying Who

In the process of defining objectives it is important to determine who should participate in the workshop. As Williams (1994:18) notes, “Determining who should attend, who they represent, and how they will be encouraged to attend is one of the most important steps...” Identifying participants should involve thoughtful consideration of the objectives of the workshop and who has a stake in the issues to be discussed. A key goal is to create a workshop environment where participants feel welcome and safe to share their perspectives. Thus, it is important to anticipate how power dynamics between participants might affect their desire to attend and ability to participate. Variables that could affect group dynamics include sex, race, ethnicity, educational background, literacy and language skills, religion, sexual orientation, and rank within an organization. A facilitator must consider factors such as the balance of women to men, of minority groups to majority groups, and of managers and policy makers to those not in decision-making positions. If any of the stakeholder groups are typically not included or marginalized from these types of events or discussions, the next step involves determining how to involve them, and

identifying and addressing any other factors that could create alienation or other challenges that could potentially derail the workshop from its stated objectives.

In our case, we sought to bring together a diverse group of land managers, policy makers, research scientists, harvesters, buyers and other NTFP stakeholders. We anticipated greater participation from resource managers, policy makers and researchers, given that these groups are often paid to attend meetings as part of their regular job activities. Past experience had taught us that harvesters and field-level buyers² do not often attend formal workshops for several reasons that can be summarized as: time and financial constraints; doubts about relevance or benefit; and power dynamics involving trust and respect.

First, often harvesters cannot afford time off work to attend, and/or the transportation/lodging/food costs are prohibitive. Second, the workshop may not be directly relevant or useful to them or produce any tangible benefits. Third, they may question whether their participation will be valued, if their contributions will be heard, and if it will make any difference or not. Indeed, many harvesters expressed concern that participating in meetings with land managers might result in increased regulation and more conflict. In addition, differences in cultural background, formal education, literacy and language skills often create barriers that deter participation. One final challenge is that harvesters are very often an invisible workforce, and workshop organizers may not even know who the harvesters are to invite them. If they do know, they often do not know how to contact them to invite them. This was one advantage of our research design that focused on seeking out harvesters in the field prior to the workshop.

We attempted to address the cost barrier by putting a line-item in our budget specifically for bringing harvesters to the workshops. This strategy had mixed success. We were able to help one harvester attend the first workshop, but the two harvesters in the Southeast who expressed interest in attending cancelled the day before the workshop. We were more successful in getting harvesters to the third (Northeast) and the fourth (Pacific Northwest) workshops, but in these cases the harvesters refused financial assistance. Nevertheless, our offer to help cover expenses appeared to be appreciated. Thus, we believe that having money in the budget was important, but not sufficient to ensure harvester participation.

To make the workshop relevant and useful to all participants, including harvesters, we took time during our fieldwork to talk with NTFP stakeholders for their input. We formalized this process with the pre-workshop registration form, which gave us insight into potential participants' interests and expectations. Nevertheless, we recognized that our workshop focused on the abstract possibility of future inventory and monitoring programs, and did not offer much immediate benefit to harvesters. While harvester participation was not critical for the success of the workshops, their participation was valuable and we made every effort to invite them.

Addressing the issues of power, respect and trust was more challenging. We emphasized that the purpose of the workshops was to initiate a dialogue about collaborative approaches to inventory and monitoring and that we valued, wanted, and needed everyone's input. Each workshop began with an overview of how the workshops fit into the larger project and how the workshop discussions would be used to develop recommendations which we would present to the National Commission on Science for Sustainable Forestry, along with federal and state resource managers and policy makers. We stated that we hoped that the recommendations would lead to further action, but we made an effort not to create false expectations. The fact that our research was focused predominantly on documenting harvesters' perspectives and entailed spending a year conducting fieldwork helped to illustrate that we valued and wanted to hear and learn from harvesters. In regards to language skills, the facilitator and several of the regional liaisons spoke Spanish and we were prepared to provide other translation if needed. Yet again, these efforts did not result in increased participation of harvesters. We were left with confirmation of our original hypothesis that the best way to reach harvesters is to visit them where they live and work.

It is worth noting that we had the greatest participation of harvesters in the PNW, where our institute is based and where we had already developed long-term relationships with harvesters. This speaks to the importance of relationship building and trust building. We knew all of the harvesters who participated and we had visited many of them in the field just a few weeks prior to the workshop. In addition, various workshops on NTFPs have been held in the Pacific Northwest in the recent past so the harvesters knew more or less what to expect, were familiar with the culture of workshops, and felt more comfortable with the process.

When tackling Step Two and considering ‘who’ to involve as participants, it is also important to consider who will be part of the facilitation team. In international training efforts, it is critical to have at least one facilitator from the same area and ethnic group as the majority of the participants. Working in the United States, this was less of a concern, although we did address this by having our regional liaisons serve as integral members of the workshop team. The facilitators’ sex, ethnicity, age, perceived class, experience, education, language and mannerisms, and other variables can also influence group dynamics. If the group perceives the facilitators to be outsiders, unqualified, or inappropriate for any reason, this can also have a negative effect on the workshop’s success. One way we attempted to address this was by having time at the beginning of the workshop to share our own experiences with NTFPs and by having display tables full of NTFP literature and items that we had collected throughout the region.

The next consideration is to decide ‘how many’ people should participate. Knowing that we wanted to maximize interactive discussions (rather than formal presentations with little discussion) we aimed for groups of 15-30 to optimize opportunities for quality discussion, sharing and learning. Since the workshop topic was new and very specific it was challenging to gauge interest beforehand. Our hunch was that interested participants would be dispersed across organizations and disciplines. We thus advertised broadly and used a variety of methods to announce the workshops, including sending email announcements, hand delivering invitations, posting flyers, and sending formal letters of invitation to Tribal Councils. Of these methods, we relied primarily on email to save on costs. Email is an effective method for spreading the word but it is critical to target individuals or organization likely to have an interest in the topic and to use a subject line that indicates it is a legitimate message and not spam. Equally important is to have the workshop announcement in the text of the email and not as a file attachment, given the potential for computer programs and/or people to delete unknown attachments due to concerns over viruses.

In total, our advertising efforts included contacting:

- 150+ University professors at regional forestry schools
- 100+ Extension and RC&D agents
- 80+ NGOs (e.g., National Network of Forest Practitioners, United Plant Savers, Heritage)
- 80+ Government scientists (e.g., FIA program)
- 300+ Federal and State government land managers
- 100+ Private consultants
- 40+ Regional Native American Tribes
- 200+ NTFP harvesters and/or buyers
- Email mailing lists: Forest List <forest@listserv.funet.fi>
 Medicinal Plant Working Group <mpwg@lists.plantconservation.org>
 Association for Temperate Agroforestry <afta-l@lists.ufl.edu>
 Ethnobotany Digest <ethnobotany@yahoogroups.com>
 Earth Anthropology <eanth-l@listserv.uga.edu>
 FAO Nonwood Forest Products Digest <nwfp-digest-L@mailserv.fao.org>

These efforts resulted in a total of 101 people participating in our workshops, including the IFCAE team. See the workshop summaries in Part Two for detailed information on who attended.

Step Three: Determining When

In determining when to hold a workshop there are several factors to consider. Clearly, it is best if you can plan around competing events, activities, holidays, bad weather and seasonal availability so that the workshop is held at the most convenient time for the participants. To do this, we began by ensuring that our workshops would not be competing with other closely related conferences or meetings, such as the Society of American Foresters meeting or the World Forestry Congress. Next we tried to anticipate competing responsibilities and activities of the participants that might reduce attendance. This included factors such as when harvesters are out picking, when Forest Service folks are out on fires, and holidays. We delayed our first workshop in the Western region to occur as late in fire season as possible. We also tried to provide enough lead time so that people could plan to attend.

In addition, site availability, funding and deadlines often determine workshop dates and indeed the scheduling of our remaining three workshops was influenced to some degree by these issues. We had originally planned on completing the fieldwork and workshop for the Pacific Northwest in the summer of 2002. Delays in funding forced us to reschedule for summer of 2003. As a result, we held the Southeast and Northeast earlier in the year than originally planned so that we could return to the Pacific Northwest in time to complete fieldwork there. Still, we hoped that since the dates were prior to the spring bloom, which is typically a slow time for harvesters and buyers, that this would reduce one barrier to their participation. In retrospect, this did not seem to influence their participation and resulted in other participants having to cancel or brave winter storms to attend. Likewise, scheduling of the Pacific Northwest workshop was influenced in part by our desire to have workshop results to present at the World Forestry Congress in early fall 2003.

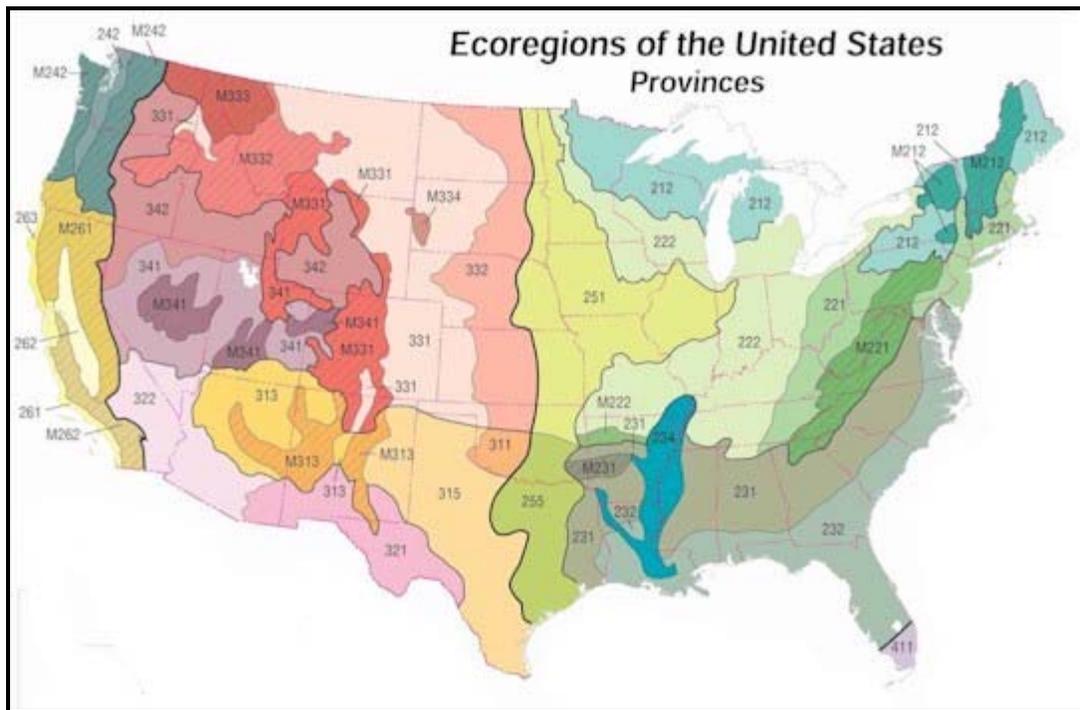
Step Four: Determining Where

Although national in scope, this project relied on “ecosystem provinces” to define the landscape-level ecological contours of this study. These provinces are part of the larger ecoregions map, which was developed by Robert Bailey, a Forest Service scientist and adopted by the agency in 1993 for use in ecosystem management.³ Table 1 and Figure 1 below highlight our research sites.

Table 1. Bailey’s Ecoregions

<u>Area</u>	<u>Ecosystem Province</u>
West (Rocky Mountain States)	M313 AZ-NM Mtns. Semi-desert – Open Woodland – Coniferous Forest– Alpine Meadow M331 S. Rocky Mtn. Steppe – Open Woodland – Coniferous Forest – Alpine Meadow
Southeast	231 Southeastern Mixed Forest Province 232 Outer Coastal Plain Mixed Forest Province
Northeast and Great Lakes	212 Laurentian Mixed Forest Province 221 Eastern Broadleaf Forest (Oceanic) Province
Pacific Coast	M242 Cascade Mixed Forest – Coniferous Forest – Alpine Meadow Province M261 Sierran Steppe – Mixed Forest – Coniferous Forest – Alpine Meadow Province

Figure 1. Ecoregions of the United States. Provinces.



These provinces were selected to capture as much geographic, cultural and ecological diversity as possible, as well as to include areas where scientists and managers knew little about gathering traditions. The intent was to test our hypothesis that NTFP gathering is a widespread activity throughout the United States. In the course of fieldwork, our geographic scope was expanded to include the Ozarks and the Appalachian highlands.

Given the enormous geographic scale of our research area, determining the location for the regional workshops was particularly challenging. We worked with our regional liaisons to identify centrally located facilities within each study region. We evaluated these potential cities based on various factors, including: ease of access for participants anticipated to attend; proximity to National Forests and NTFP hotspots; access via public transportation and distance and ease of access from an airport. If the city met these criteria, we began considering what specific facilities might be appropriate and available. Our regional liaisons and internet searches helped us identify potential facilities. These facilities were evaluated on a variety of variables, including: cost, room capacity and layout (whether or not there were movable chairs and tables), AV equipment and kitchen facilities, the ability to cater lunch ourselves, ease of access; proximity to public transit, hotels, and restaurants for participants (and facilitators) coming from out of town, and the compatibility of the host facility to our mission and workshop objectives and the potential to involve the hosts in the workshop. We also looked for locations that would facilitate the participation of as many stakeholders as possible.

The results of this selection process were mixed. Our first regional workshop was for the Western Region, which included Wyoming, Utah, Colorado, Arizona and New Mexico. Denver was centrally located, was the Forest Service and Bureau of Land Management's Regional Headquarters, was located within a day's drive of many national forests and seemed a good choice. Picking a specific facility was greatly facilitated by the fact that our fieldwork began in Denver so we could visit the potential workshop

locations to get an accurate estimate of the site appropriateness. On our first day of searching we discovered the conference room at the Regional Headquarters in Denver, which proved to be a wonderful location and space in which to work.

In contrast, determining the location and facilities for our southeastern workshop did not go as smoothly. First, it was our largest region, spreading along the coastal states from eastern Texas to Virginia. Second, we had to choose a location without first seeing the site, which is always risky. The USDA Forest Service Southern Headquarters is located in Atlanta, which seemed centrally located, with good airport access and public transit, and we hoped it would facilitate Forest Service participation. Unfortunately, it turned out that the traffic and parking headaches of the city made the Regional Headquarters a poor choice, and we did not have much interaction with the managers and scientists in the building. Had we known that nobody west of Georgia would attend we would have held the meeting in Asheville, North Carolina, a central area for regional NTPF activity.

In locating our third workshop we also faced the challenge of a large geographical area. In addition, the area was not contiguous, as it included New England, the Great Lakes Region, and western Appalachia. We chose Pittsburgh given its general centrality, and the possibility that folks from the Great Lakes area and Washington D.C. might be able to fly, take a train, or drive to attend. Again, we were forced to select a specific location sight unseen as we needed to get the announcement out and the plans made before our fieldwork would bring us that far north. Searching for a site in Pittsburgh via the internet proved to be very challenging and required some persistence. We searched primarily for alternatives to governmental offices to provide some balance between our locations and to encourage environmental groups to participate. We finally located the Audubon of Western Pennsylvania's Beechwood Farms Preserve.

For the Pacific Northwest workshop, our region included Washington, Oregon and northern California. We selected Portland because it provided good public transit and airport access. The World Forestry Center was a logical choice for the workshop site due to its location on the light rail system. Thus, it was easy for participants staying in hotels or homes throughout the city to reach the site. Table 2 provides a summary of the workshop logistics.

Table 2. Regional Workshop Logistics

Region	Workshop Date	Workshop Location	Participants ⁴
Western	October 17, 2002	Denver, CO Forest Service Regional Headquarters	25
Southeastern	February 27, 2003	Atlanta, GA Forest Service Regional Headquarters	19
Northeastern	April 4, 2003	Pittsburgh, PA Audubon, Beachwood Farms Nature Preserve	27
Pacific Northwest	September 4, 2003	Portland, OR World Forestry Center	39

Step Five: Determining Why (Learning-needs Analysis)

Workshops need to be relevant and useful to participants and only participants themselves can help identify what is relevant and useful to them. Involving participants from the beginning is integral to participatory facilitation approaches and illustrates that you value and respect the participants and that you don't want to waste their time. Our goal was to build on the experience and expertise of the people attending and to make sure we didn't leave anyone behind. In addition, understanding the expectations and interests of the audience prior to the workshop provides a means to gauge if the workshop objectives are on target. It also provides an opportunity to identify potential mismatches between the prospective

participant's needs and the workshop's objectives. If there are mismatches, the facilitator can either adapt the agenda to address the different expectations, or they can contact the participant and let them know more details about the workshop, so they can determine whether or not to participate.⁵ Taking the time to know your audience and to get input on the agenda also helps set the tone for the workshop.

We designed a pre-workshop registration form that functioned as a way to identify participants' expectations and interests (See Appendix 1). We distributed the form via email to everyone expressing interest in attending. Our response rate was high, with approximately 75% responding in the western and southeastern region, 98% in the northeastern region and 86% in the Pacific Northwest. Through this process we learned that our participants were diverse, e.g. some with many years of experience with NTFPs and some with none; some social scientists, some natural resource scientists; some government employees some from the non-profit sector, etc. This pre-registration process proved invaluable in helping us understand our audience better and allowed us to prepare more effectively. For an example of the type of responses we received, see Appendix 2.

Step Six: Determining What (Content)

Ice-breakers and openers are useful features of a participatory workshop. They can be designed to give participants meaningful information about the others in the room, they can help relax and/or energize the group, and they help set the tone of the workshop by getting everyone involved.⁶ Ice-breakers and openers are particularly useful if the group of participants do not know one another. In all our workshops we were able to go around the room and let everyone take a moment to share something about their interests in NTFPs. In groups over 15, this often becomes ineffective and time-consuming and facilitators should have plans ready for alternative ways to do introductions. For example, in the fourth workshop, I used a technique in which participants were asked to stand for a moment if they fit a certain description (e.g., lived in Washington; picked floral greens; had been involved with NTFPs more than ten years, etc.) This provided a quick means to provide an overview of the diversity and strengths of the group.

We derived the specific content of the workshops directly from the objectives. For example, one objective was to share our preliminary findings for review and feedback. To do this, we conducted a preliminary analysis of the fieldwork data. In this process, a variety of reasons why harvesters might be valuable allies in an inventory and monitoring effort emerged. We presented this for review and comment. In later workshops we incorporated direct quotes from harvesters to illustrate these points. (See Part Two, PNW workshop for a transcript of this presentation).

Based on our objectives we also knew we wanted to present examples of harvester involvement in inventory and monitoring efforts. Our goal was to have the participants in the inventory and monitoring programs present their experiences to the group, and in this we were successful in the southeast and Pacific Northwest regions. In the western region the case studies were presented by workshop facilitator Kathryn Lynch and included the National Inventory of Costa Rica, La Montaña de Truchas Community-Based Forest Products program, and the Medicinal Plant Working Group's osha monitoring efforts. In the southeast, Forest Service researchers Gary Kauffman, presented the medicinal plant monitoring efforts in North Carolina, and Marianne Burke discussed the involvement of South Carolinian sweetgrass harvesters in her research. In the northeast, project team member Rebecca McLain developed an overview of participatory approaches to inventory and monitoring and discussed the case studies of Audubon, NatureMapping, among others. In the Pacific Northwest we had two case studies presented by harvesters – one on monitoring matsutake mushrooms in Oregon and one regarding medicinal plant monitoring in northern California – and one by a researcher who involved floral greens harvesters in her research (see Part Two, below for more details).

In addition, pre-registration results (and general good scientific practice) indicated we should take time to define the terms central to the workshops, including nontimber forest products, harvester, inventory, and monitoring. This was particularly critical given the diversity of our participants who were coming from different academic disciplines and life experiences.

Our third objective was to gain input from participants regarding participatory approaches to I & M. We initially built the focus group discussions around the recommendations provided by ecologists Kerns et al. (2002), and provided a copy of this chapter in their workshop packet. However, evaluations from the first workshop indicated this was too broad for the time available, so we focused our approach so that in the final workshops we sought information and perspectives on: 1) Regional/local inventory and monitoring efforts of NTFPs; 2) Potential barriers to including harvesters in inventory and monitoring and how to overcome them; and 3) Recommendations on the design and implementation of a pilot program that would involve harvesters in inventory and monitoring.

Our last objective was to help facilitate networks between the participants. For us this was more a methods issue than a content issue, and so this objective is discussed further below. Nonetheless, it is useful to mention that we created time within the agenda for mingling.

Step Seven: Identifying How (Methods)

In our workshops we emphasized participatory methods and interactive processes – including before, during and after the workshop – to reflect current best practices in facilitation and adult learning theory as well as current trends in both society and organizations (Eitington 1996). Williams (1994:26) writes, “Participatory approaches are the most appropriate for adult learning... They are the most effective and enjoyable. Participatory training is characterized by a respect for the participants, who are active in their own and others’ learning.” Our approach was also greatly influenced by engaged (or critical) pedagogical theory, which examines the issues of power in the context of teaching and learning by questioning how knowledge is produced.⁷

Williams (1994:26) notes that it is best to use a variety of training techniques (case study, presentations, action planning) so that you facilitate the group through a process of learning, discovering, and creating new solutions to current challenges. Since people have different learning styles not all techniques will work for everybody. Mixing various techniques provides space for everyone’s preferred learning style. Special care should be taken if the group is unaccustomed to participatory methods, since these methods may be seen as threatening, silly, or a waste of time, thus affecting the dynamics and interactions of the group. In all activities, you must choose activities that are culturally acceptable, non-threatening, and directly linked to the objectives.

As described previously, prior to the workshop a registration form functioned to identify expectations and interests of the participants. During the workshop, focus groups provided opportunities for interactive sharing/learning. Finally, we invited all workshop participants to review and edit the workshop report.⁸

Referring back to our objectives, we recognized that we were seeking in-depth information from the various stakeholders on what they considered to be the barriers to implementing collaborative inventory and monitoring programs. We knew different stakeholder groups would face different challenges in participating in a collaborative I & M effort, so we wanted to provide an opportunity for these differences to be articulated. Therefore, the use of focus group discussions was a logical choice. Plus, adult learning theory suggests that people learn best in small groups, therefore our workshops relied on small focus group discussions

A focus group is a tool that brings together a small group of generally homogeneous people to discuss a specific topic.⁹ "Small" implies no more than ten people, and our focus groups included anywhere from three to ten participants. "Homogeneous" implies that the idea of a focus group is to learn about how a certain group feels about an issue. Having a homogenous group allows participants to build upon each other's comments, often providing greater depth into an issue than is obtained through individual interviews or surveys. Therefore, we divided participants into separate harvester, buyer, resource manager, researcher, tribal, and extension/consultant focus groups. In addition, having single-stakeholder groups often provides a forum to hear voices that traditionally have been unheard. In this case, harvesters and buyers of NTFPs were given a space to share their perspectives. Focus groups typically have a moderator, and in our case we divided the IFCAE team amongst the various focus groups. In workshops that had more focus groups than IFCAE moderators, we identified one person in the group to function as the moderator. The main tasks of the moderator were to ensure that the groups stayed focused on the discussion questions, ensure the main points were captured on the flipcharts, and keep an eye on time.

Each focus group was directed to designate someone to record the discussion on flipcharts and someone to present to the group during the following plenary. The focus group facilitator made sure the group stayed on task and took additional notes if the richness of the discussion was not being fully captured on the flipcharts. Unfortunately, some of the detail is inevitably lost unless the discussions are taped and transcribed, which these were not. However, some discussion that might have been lost was recaptured through our process of giving participants a chance to review and add information to the transcript drafts sent to them within two weeks of the meeting. This dialogical method treats the transcripts as a work in progress, maximizing the avenues by which participants can contribute.

Focus group facilitators were also provided with the following guide to help them in their tasks:

Small Group Facilitator Guide

Your task is to coax and encourage rich discussion, and keep your group on track. Some tricks to help:

- When group begins, introduce yourself as the facilitator for the discussion, and explain how your task is to make sure that everyone gets to talk and we get through all the questions.
- Assign roles first- who is going to write and who is going to present. Hand the person who is writing the pens and suggest that the group capture the main points as you go, so you don't lose any of the richness of the discussion. Try to get as much of the critical points on the flipchart as possible.
- Start by reading off the first question, then opening up the floor for comment.
- If someone starts answering a question that comes later, kindly note that the group will get to that, and suggest they write it down so it doesn't get forgotten. When you get to that point, start with that person.
- Pay attention to who is talking, and if someone isn't participating, try to make space for them to contribute.
- At reasonable interval, ask if there are any more points to be made and pause. If not, move on to the next question. Read it out loud, to once again orient the group to the task.
- If answers persistently don't relate to the question, use best judgment- either ask "how does that fit in with x,y,z (referring back to the question), or set up a few minutes to exhaust topic and then get group back on track.
- Make sure your group's title is at the top of the page- and all participants listed. Number flipcharts before taking them down, to facilitate easy transcription later.

Small Group Facilitator Guide cont.

When discussing barriers, encourage your group to go beyond the simple answer of “not enough funding.” If they don’t bring it up themselves, ask if there are any economic barriers; political barriers; cultural barriers; institutional barriers. Then really push to get some creative answers for how to overcome these barriers. We are looking for real-life ideas that we might recommend, so try to get as concrete as you can.

The last question your group will discuss has many facets and components. If your group gets stuck and/or finishes early, use the questions attached, based on the Inventory and Monitoring chapter guidelines provided by Kerns et al. 2002.

As mentioned above, facilitating the development of networks between the participants was more a how (methods) issue, than a what (content) issue. The best way to help facilitate networks is to provide time for participants to get to know one another. Therefore, we created time within the agenda for mingling. We scheduled thirty minutes for coffee and breakfast mingling prior to the workshop. During the workshop, participants introduced themselves to the group and had an opportunity to share their perspective in the focus group work. In addition, we provided lunch and two snack breaks so that participants would not have to leave the site to eat and could maximize their time together. In the Northeast and Pacific Northwest workshops we were able to offer post-workshop hikes, which created another space for interaction and dialogue. Finally, we included the participant list in the workshop summary and made it available to all participants via our website.

In addition to scheduling time for interaction, the use of puzzles, role-plays, skits, and games are often used to help break down barriers and build cohesiveness within a group. For example, before we started the focus group work, we asked each group to work together to tackle the “toothpick challenge” as described by Maser (1996). We used this activity to emphasize the need to look for creative solutions to problems that seem impossible. Thus, the activity functioned as a ‘warm-up’ for the focus group work in which we asked them to work together to address complex issues.

The Role of the Facilitator

It is important to take time at the beginning of every workshop to clarify the role and responsibilities of the facilitator, particularly when the audience is unaccustomed to participatory processes. Broadly, the facilitator is responsible for setting the workshop objectives, ensuring that these objectives are met, and maintaining a healthy group dynamic in which to do so. The check-list we used was adapted from Williams (1994:30-32) and Eittington (1995). This checklist can also be used as part of the evaluation process.

It is worth mentioning that the time-keeping responsibility is one of the most unpopular but important tasks of a facilitator. Facilitators should ensure to the best of their ability that the agenda is reasonable and then keep to the agenda. This doesn’t mean there is no flexibility. If in watching group dynamics the facilitator feels that changes are needed, s/he should do so in consultation with the group. The group should make the changes explicit, so that everyone is clear about the new agenda and timing. Our experience has been that participants will appreciate your efforts at the end of the day, and the workshop will end with a sense of accomplishment rather than a sense of unfulfilled expectations. Many well-meaning meetings have lost their effectiveness due to poor time management, which also sends the signal to participants that you don’t value their time. Eittington (1995) provides tips on how to keep groups moving through their activities, and how to get participants back from breaks, etc.

Facilitator Check-list.**Pre-workshop preparation:**

- Visit workshop space prior to workshop date, set up if possible
- Ensure that workshop space will be unlocked and ready to go
- Ensure that all materials, AV equipment, food, etc. will be there
- Ensure that participants have good directions to workshop location
- Ensure there is a clock in the room
- Prepare materials for workshop activities
- Prepare workshop packet with relevant information, agenda, and evaluation form

Clearly communicate:

- the workshop objectives
- agenda
- the participatory approach that is the foundation of the workshop
- instructions for all activities
- ground rules for participating (creating safe respectful space for sharing)

Keep the group on task:

- listen carefully to what is being shared
- observe group dynamics
- ensure all have opportunity to participate
- identify common threads
- identify any differences
- create mechanisms for participants to learn from each other
- ensure that each person feels part of the group, validated, heard
- if discussion wanders off topic, gently bring it back
- keep a close eye on the time to ensure all tasks get completed

Maintain good group dynamics:

- Encourage balanced participation
- Recognize and deal with participants who: monopolize discussions, interrupt others, don't have good listening skills, who complain, argue for arguments sake, or put down other peoples ideas. See Eitington (1995:32-36) for suggestions on how to deal with these challenging situations.

Evaluation

Evaluation is an integral part of participatory workshops. We developed an evaluation sheet (see Appendix 3), which was included in everyone's workshop packet. During the morning overview when we reviewed the packet, we highlighted the evaluation form and stressed that we greatly valued participant input and that their anonymous comments would be used to improve future workshops. The results of these evaluations are found at the end of each workshop summary in Part Two.

Participant evaluations of the workshop revealed that in general expectations were met and that the networking opportunities and the small group work were particularly valuable. Participants also noted the diversity of the participants and exposure to different perspectives (botanists, private, agencies, etc.) as a highlight of the workshops. Suggestions for improving the workshop included such items as focusing the morning activities and involving more harvesters. Our previous work had led us to anticipate this dilemma in our research design, which is why we did the interviews first, so we could invite harvesters/and if they couldn't make it, attempt to bring their perspectives to the table. We worked on clarifying this in subsequent workshops and brought in harvester quotes to help address this issue.

Post-workshop Review Process

The day after each workshop the IFCAE team, including the regional liaisons, transcribed the flipcharts from the focus group they had participated in, including any notes they had taken to flesh out some of the flipchart ideas. Once completed, results were incorporated into a single document, along with the workshop agendas and participant lists, and sent to all participants for review. We asked participants to review the document to verify accuracy and invited them to elaborate any of the thoughts or ideas shared. We requested comments back within one to two weeks. Providing this opportunity to review and comment was an important element of our participatory approach. It illustrated our commitment to ensuring we captured the discussions accurately. This was especially important since we did not tape record and transcribe our focus group discussion. Once we had incorporated the comments and revised the document, we posted the workshop summary on IFCAE’s website: www.ifcae.org/projects/ncssf1. These four documents comprise Part Two of this document. Table 3 summarizes the timeline we used.

Table 3. Workshop Timelines

Region	Workshop Announced	Workshop Date	Draft Results Sent	Comments Requested	Posted on web
Western	09/06/02	10/17/02	10/28/02	11/08/02	11/16/03
Southeastern	12/13/02	02/27/03	03/02/03	03/15/03	03/29/03
Northeastern	02/07/03	04/04/03	04/08/03	04/22/03	04/30/03
PNW	02/09/03	09/04/03	09/08/03	09/22/03	10/07/03

National Retreat

The objectives for the national retreat were to: 1) Compare regional results—including the various barriers and strategies proposed for including harvesters in NTFP inventory and monitoring; and 2) Develop final recommendations regarding the development of inventory and monitoring efforts to assess NTFP sustainability. As part of our original research design, we had identified four regional liaisons who would participate in their regional workshop and then bring those ideas and perspectives to the national retreat. Therefore, the research design itself identified who would be participants in this final retreat. Participants included the IFCAE team: Katie Lynch, Eric Jones, Rebecca McLain and the four regional liaisons: Maureen DeCoursey (West), Marla Emery (Northeast), Sarah Workman (Southeast), Tom Love (Pacific Northwest). In addition, since we were seeking to synthesize the project results, we included our Component 1 (NTFP species database expansion) advisor, Dave Pilz.

In addressing when to hold the retreat, we decided to hold it the week after the Pacific Northwest regional workshop. This allowed regional liaisons the opportunity to participate in the regional workshop as well as the retreat if they were able, and created momentum and focus for the facilitation team. In addition, this allowed us to complete this project component prior to the World Forestry Congress.

In addressing where to hold the retreat, Silver Falls State Park, about 45-minutes south of Portland, OR, seemed an optimal location. The facilities at Silver Falls include meeting facilities with nearby cabins, and a dining hall that provides all meals. The location in the woods provided the perfect retreat atmosphere and everyone was able to focus on the tasks at hand with limited distractions. Plus, Silver Falls is famous for its waterfalls, and our post-work evening hikes were enjoyable perks for the team.

In regards to content, we envisioned this retreat as an opportunity for the group to spend some dedicated time exploring the various political, economic, cultural and ecological considerations that various

stakeholder groups (policy makers, land managers, harvesters and buyers) would need to address when designing an I & M program that involves harvesters. To narrow this, we used a modified needs assessment, in which we asked the team for help in prioritizing a list of questions that represented key data gaps that had been identified in the regional workshops. Recognizing that there are no simple answers, or right answers, we used this prioritized list to guide the retreat discussions. The retreat format was based on open and free-flowing think tanks. Using this method created space for the team to brainstorm, vision, and create based on the diversity of previous experiences we all brought to the table – with the goal of providing sound recommendations on next steps for I & M pilots.

Conclusion

It is our hope that this discussion of our planning process is useful to anyone interested in developing workshops on complex natural resource issues involving diverse stakeholders. Much of workshop planning is based on basic common sense, we hope that this document provides a useful guide to organizing that common sense. Although this overview cannot substitute formal training and experience in facilitation, it does outline some key elements that a facilitator needs to consider when developing a workshop and illustrates these issues with the case study of our workshops. Please remember that if you are interested in developing workshops, the specific activities, agenda and methods you will use should be directly derived from the specific objectives you have and the specific participants who will be attending. Therefore, use this overview like a guide, not a recipe and be sure to add in your own creativity and flavors so that the workshop is authentic and real. We welcome your feedback and stories of your own experiences with participatory facilitation.

References

- Apple, Michael W. 1995. *Education and Power*. New York: Routledge.
- Bernard, H. Russel. 1994. *Research Methods in Anthropology. Qualitative and Quantitative Approaches*. 2nd Ed. Thousand Oaks, CA: Sage.
- Eitington, Julius E. 1996. *The Winning Trainer. Winning Ways to Involve People in Learning*. 3rd Edition. Houston, TX: Gulf Publishing Company.
- Freire, Paulo. 1967. *Educação como Practica da Liberdade*. Rio de Janeiro, Brazil: Raz e Terra.
- . 1986. *Pedagogy of the Oppressed*. New York: Continuum.
- hooks, bell. 1994. *Teaching to Transgress: Education as the Practice of Freedom*. New York: Routledge.
- Giroux, H. A. 1994. *Disturbing Pleasures: Learning Popular Culture*. New York: Routledge.
- Kerns, Becky K., Leon Liegel, David, Pilz and Susan J. Alexander. 2002. Biological Inventory and Monitoring. In *Non Timber Forest Products in the United States*. Eric T. Jones, Rebecca J. McLain, James Weigand (eds). Lawrence: University of Kansas Press. Pp. 237-269.
- Maser, Chris. 1996. *Resolving Environmental Conflict: Towards Sustainable Community Development*. Delray Beach, FL: St. Lucie Press.
- McLaren, Peter. 1998. *Life in Schools: An Introduction to Critical Pedagogy in the Foundations of Education*. New York: Longman.

- Pilz, David and Randy Molina. 2002. "Commercial harvests of edible mushrooms for the forests of the Pacific Northwest United States: issues, management, and monitoring for sustainability." *Forest Ecology and Management*. Vol. 155: 3-16.
- Slocum, Rachel, Lori Wichhart, Dianne Rocheleau, Barbara Thomas-Slayter, eds. 1995. *Power, Process and Participation. Tools for Change*. London, UK: Intermediate Technology Publications.
- Srinivasan, Lyra. 1990. "Tools for Community Participation – A Manual for Training Trainers in Participatory Techniques." *PROWESS/UNDP Technical Series*. NY: Women, Ink.
- US Forest Service. *National Strategy for Special Forest Products*. FS-713. August 2001.
- Vella, J. 1989. *Learning to Teach: Training of Trainers for Community Development*. Washington D.C.: OEF International.
- Williams, Suzanne. 1994. *The Oxfam Gender Training Manual*. Oxford, UK: Oxfam (UK and Ireland).

Notes

-
- ¹ See www.ifcae.org/ntfp to access both databases. For more information on the results of the whole project, see *The Relationship between Nontimber Forest Product Management and Biodiversity in the United States* on our website. For in-depth information on the results of Component 3: Federal and State Survey Expansions, see the forthcoming General Technical Report from the Forest Service. For a more in-depth analysis of participatory approaches to inventory and monitoring, including theoretical background, case studies, and recommendations for various stakeholders, please see *Nontimber Forest Product Inventorying and Monitoring in the United States: Rationale and Recommendations for a Participatory Approach* on our website. www.ifcae.org/projects/ncssf1/
- ² The term "buyer" in nontimber forest product industries generally refers to the person who procures raw materials from harvesters. Typically a "buying station" is also the place where processing and/or manufacturing will occur or it is a transfer node between the field and the processor and/or manufacturer. For some species, like wild morels (*Morchella* spp.) one is likely to see mobile buying stations temporarily staged where a fruiting is occurring.
- ³ For more information, see www.fs.fed.us/land/ecosysmgmt/ecoreg1_home.html
- ⁴ Participant totals include the three project PIs (Eric Jones, Kathryn Lynch and Rebecca McLain) who participated in each workshop. Therefore, a total of 101 different people attended.
- ⁵ If there are a lot of mismatches, then the facilitation team should return to their objectives, who they sought to invite and how they advertised, to seek any inconsistencies and then re-strategize on how to proceed.
- ⁶ See Eitington (1996:1-23) for great overview and discussion of why and how to use ice-breakers and openers.
- ⁷ Some of the most influential writers in the field of engaged (or critical) pedagogy include Michael Apple, Paulo Freire, bell hooks, Henry Giroux, and Peter McLaren.
- ⁸ Our commitment to participatory methods is also reflected in the theoretical foundation of our Participatory Learning Program within the Institute for Culture and Ecology, which is based on an engaged, learner-centered and interdisciplinary approach. See www.ifcae.org/programs/pl/ for more information.
- ⁹ For more information on focus groups, see Bernard (1994) and Slocum et al. (1995).

PART TWO:

Workshop Proceedings Harvester Participation in Inventory and Monitoring of Nontimber Forest Products

October 17, 2002 – Denver, CO

February 27, 2003 – Atlanta, GA

April 4, 2003 – Pittsburgh, PA

September 4, 2003 – Portland, OR

September 8-11, 2003 – Silver Falls, OR

Facilitated by the Institute for Culture and Ecology

Funded by the National Commission on Science for Sustainable Forestry

You are invited to a special one-day workshop

Harvester Involvement in Inventorying and Monitoring of NonTimber Forest Products

Date: Thursday, October 17, 2002

Time: 8:30 am to 5:00 pm

Location: USDA Forest Service Region 2 Office
740 Simms, Lakewood, CO
(West of Denver, 1 block north of Hwy 6, Simms exit)

Geographical Focus: AZ, NM, CO, UT, WY, MT

Purpose of the Workshop: To bring together those people interested in the sustainable management of nontimber forest products—including Federal, tribal, state, and private land managers, policy makers, scientists, buyers, and harvesters—to explore how harvesters might participate in a comprehensive biological monitoring program.

Context: This workshop is part of a national study funded by the National Commission on Science for Sustainable Forestry (NCSSF). www.ncssf.org

Registration: This workshop is free and open to the public. *However, pre-registration is requested. Please contact Katie Lynch no later than October 11, (503-320-1323, ktlynch@ifcae.org).

Organized by the Institute for Culture and Ecology

www.ifcae.org • 503-320-1323 • PO Box 6688 Portland OR 97228

PLEASE DISTRIBUTE WIDELY

EMAIL ANNOUNCEMENT

Please Circulate: A Special One-Day Workshop

HARVESTER INVOLVEMENT IN INVENTORYING AND MONITORING OF NONTIMBER FOREST PRODUCTS (aka Special Forest Products) in the western region states of Colorado, New Mexico, Arizona, Utah, Wyoming and Montana.

Date: Thursday, October 17, 2002

Time: 8:30 am to 5:00 pm

Location: USDA Forest Service Region 2 Headquarters

740 Simms, Lakewood, CO (Located west of Denver, one block north of Hwy 6 on Simms.)

Who Should Attend:

Anyone interested in the sustainable management of nontimber forest products, including Federal, tribal, state, and private land managers, policy makers, scientists, buyers, and harvesters from the states listed above.

Purpose of the Workshop:

To explore how harvesters might participate in a comprehensive biological monitoring program of nontimber forest product resources (including medicinal plants, wild edibles, floral greens, etc.)

Background:

This workshop is part of a national study funded by the National Commission on Science for Sustainable Forestry (NCSSF) www.ncssf.org. The aim of the project is to assess the relationships between forest management practices, nontimber forest products (NTFPs), and biodiversity in the U.S. For more information, visit our website: www.ifcae.org

Registration:

This workshop is free and open to the public. ** However, pre-registration is requested. For more information and to pre-register, please contact Katie Lynch no later than October 11 (503-320-1323, ktlynch@ifcae.org).

Organized by the Institute for Culture and Ecology

www.ifcae.org 503-320-1323 PO Box 6688 Portland OR 97228

**Special One-Day Workshop:
Harvester Involvement in Inventorying and Monitoring of Nontimber Forest Products**

Thursday October 17th, 2002 8:30am—5:00pm
USDA Forest Service, Rocky Mountain Regional Headquarters
Lakewood, CO

Workshop Objectives:

By the end of the workshop, participants will be able to:

1. Illustrate the need for inventorying and monitoring efforts of nontimber forest products (NTFPs);
2. Discuss some of the political, economic, and social issues surrounding the management of NTFPs, specific to their area/district/region;
3. Discuss several strategies for including harvesters in inventorying and monitoring;
4. Identify next steps for developing inventorying and monitoring pilots;
5. Build networks with other stakeholders in the region with an interest in NTFPs.

Workshop Agenda:

8:30 – 9:00 Registration and Breakfast Mingling

9:00 – 9:35 Welcome and Group Introductions

9:35 – 9:40 Overview: Workshop Objectives and Agenda

9:40 – 10:35 Presentations: Inventory and Monitoring

10:35 – 10:50 Morning Break

10:50 – 11:20 Small Group Work: Identifying Issues and Needs

11:20 – 12:00 Plenary Presentations and Discussion: Identifying Issues and Needs

12:00 – 1:00 Lunch

1:00 – 1:40 Presentations: Case Studies and Group Discussion

1:40 – 2:45 Small Group Work: Developing Pilot Programs

2:45 – 3:00 Afternoon Break

3:00 – 4:30 Plenary Presentations and Discussion: Pilot Programs

4:30 – 4:45 Final Wrap-Up and Evaluations

PARTICIPANT LIST

Harvester Involvement in Inventorying and Monitoring of Nontimber Forest Products

Thursday October 17th, 2002 9:00am—5:00pm

USDA Forest Service, Rocky Mountain Regional Headquarters, Lakewood, CO

Maureen DeCoursey

Herb Research Foundation
 Director of Sustainable Development
 1007 Pearl Street, Suite 200
 Boulder, CO 80302
 303-449-2265, 303-449-7849 (fax)
 mdecoursey@herbs.org

Carol Dawson

Botanist, Bureau of Land Management
 2850 Youngfield Street
 Lakewood, CO 80215
 303-239-3725, 303-239-3808 (fax)
 carol_dawson@co.blm.gov

Dick Deckman

Forester, USFS Rocky Mountain Region
 740 Simms Street, Lakewood, CO 80225
 303-275-5016; 303-275-5075 (fax)
 ddeckman@fs.fed.us

Lois Dvorshak

Horticulturalists, Greenhouse Manager
 UCEPC Meeker Plant Center
 PO Box 2174, Meeker, CO 81641
 970-878-3683
 loisd@nwco.quik.com

Vera Evenson

Curator, Herbarium of Fungi
 Denver Botanic Gardens
 909 York Street, Denver, CO 80206
 720-865-3651; 720-865-3683 (fax)
 evensonv@botanicgardens.org

Gary Finstad

Resource Conservationist- Ecological
 Sciences
 USDA Natural Resources Conservation
 Service
 655 Parfet St, Rm. E200C
 Lakewood, CO 80215-5517
 720-544-2820, 720-544-2962 (fax)
 Gary.Finstad@co.usda.gov

Gretchen Fitzgerald

Forester/ Wildlife Biologist
 Pagosa Ranger District
 PO Box 310, Pagosa Springs CO 81147
 970-264-2268
 gfitzgerald@fs.fed.us

Trish Flaster

Botanical Liaisons
 Boulder, CO
 303-494-1555, 303-494-2555 (fax)
 tflastersprint@earthlink.net

Robert Jay Goggles

Northern Arapahoe Nation
 PO Box 197
 St. Stephens, WY 82524
 307-857-5940; 307-857-5932 (fax)
 eagleswings@rmisp.com

Wendy Holden

Visitor Information Supervisor
 Hahns Peak/Bears Ears Ranger District
 Medicine Bow-Routt National Forests
 925 Weiss Dr., Steamboat Springs, CO 80487
 (970) 870-2140 / FTS (700) 859-2140
 wholden@fs.fed.us

Susan J. Johnson

Regional Tribal Government Program
 Manager
 Forest Service, Rocky Mountain Region
 P.O. Box 25127, Lakewood, CO 80225
 303-275-5760; 303-275-5754 (fax)
 sjohnson08@fs.fed.us

Bonnie Koblitz

Botany Intern, Bureau of Land Management
 2850 Youngfield Street, Lakewood, CO 80215
 303-239-3764
 Bonnie_Koblitz@co.blm.gov

Andy Kratz

Regional Botanist
Forest Service, Rocky Mountain Region
P.O. Box 25127, Lakewood, CO 80225
303-275-5009; 303-275-5075 (fax)
akratz@fs.fed.us

Juanita R. A. Ladyman

JnJ Associates
6760 S. Kit Carson Circle East
Centennial, CO 80122
303-703-4732
juanita_ladyman@hotmail.com

Shelby Limberis

Special Forest Products/Small Sales
Holy Cross Ranger District, White River Natl.
Forest
PO Box 190, Minturn, CO 81645
970-827-5161; 970-827-9343 (fax)
slimberis@fs.fed.us

Karl Mendonca

Zone TMA
Holy Cross Ranger District, White River N.F.
PO Box 190, Minturn, CO 81620
970-827-5715
kmendonca@fs.fed.us

Brenda Orth

Colorado State Forest Service, Golden District
1504 Quaker Street
Golden, CO 80401
303-279-9757 x.310
borth@lamar.colostate.edu

Zachary Price

Forestry Technician
Boulder County Parks and Open Space
303-441-1641 (office)
303-579-0519 (cell)
zprice@co.boulder.co.us

Tom Rennick

Forester-Silviculturist
Mancos-Dolores District, San Juan N.F.
PO Box 210, Dolores, CO 81323
970-882-6823
trennick@fs.fed.us

Tom Shore

District Ranger, Sanpete Ranger District
Manti-La Sal National Forest
540 N. Main, Ephraim, UT 84627
435-283-4151
tshore@fs.fed.us

Susan Spackman Panjabi

Botanist, Colorado Natural Heritage Program
254 General Services Blvd
Colorado State University
Fort Collins, CO 80523
970-491-2992
spack@lamar.colostate.edu

Edward Willow

Northern Arapahoe Nation
PO Box 197
St. Stephens, WY 82524
307-857-5940; 307-857-5932 (fax)
eagleswings@rmisp.com

Institute for Culture and Ecology Team:

Kathryn Lynch

Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-331-6681 (office)
ktlynch@ifcae.org

Eric Jones

Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-331-6681 (office)
etjones@ifcae.org

Rebecca McLain

Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-331-6681 (office)
mclain@ifcae.org

DIRECTIONS: Morning Small Group Work: Identifying Issues and Needs

Activity:

- ❑ Divide participants into groups of three to five, depending on number of participants.
- ❑ Task each group with discussing the following questions:
 1. What species are being harvested in your area, both commercially and/or for personal use.
 2. How is the species harvested and used as a nontimber forest product?
 3. Briefly describe current management practices for these species and also how general forest management is impacting these species.
 4. Discuss ecological, political, economic, cultural concerns.
 5. Identify specific information needed to manage these species as NTFPs.
- ❑ Have each group designate a recorder, to write responses on flipcharts, and a presenter, to share results with whole group.
- ❑ Once groups are ready, have each group report back on their small group work, presenting a brief 5 minute summary of their findings.
- ❑ Leave a few minutes for questions for clarifications related directly to their presentation.
- ❑ Once all groups have presented, lead whole group in an analysis of the findings. Similarities? Differences? Main priorities? Logical groupings?

RESULTS: Morning Small Group Work: Identifying Issues and Needs

Group 1: Carol Dawson, Dick Deckman, Gary Finstad, Karl Mendonca, Tom Rennick

1. What species are being harvested in your area, both commercially and/or for personal use.

- ❑ Firewood (Aspen, Lodgepole), transplants, Christmas trees, posts, poles, boughs
- ❑ Fiddlehead ferns, mushrooms (morels, matsutake, boletes), native seeds, herbarium specimens, medicinal plants/specimens, “moss rock”

2. How is the species harvested and used as a nontimber forest product?

- ❑ The first category of firewood, transplants, etc. are cut or dug.
- ❑ The second category of ferns, mushrooms, etc. are hand collected.
- ❑ Seed is mostly hand collected, although there are machines used.

3. Briefly describe current management practices for these species and also how general forest management is impacting these species.

- ❑ Harvesting these products is a permitted activity on Federal lands.
- ❑ Forest management activities can have both positive and negative impacts:
 - Timber harvests- may create or destroy habitat
 - Prescribed burns- may stimulate mushroom blooms

4. Discuss ecological, political, economic, cultural concerns.

- ❑ Ecological: lack adequate ecological information, lack current inventory data and cannot determine sustainable harvest levels.
- ❑ Political: land managers ability to implement sustainable land management
- ❑ Economics: knowledge gaps in land management agencies to ensure sustainability. Harvesters know the economics of their harvesting, so we must work together.
- ❑ Cultural: gaps in understanding needs, in personal vs. commercial uses, cultural rights issues, language barriers, education, and lack of accountability.

5. Identify specific information needed to manage these species as NTFPs.

- ❑ What's out there?
- ❑ What's the demand?
- ❑ What's a sustainable level of harvest?
- ❑ What management practices/activities affect the harvests?

RESULTS: Morning Small Group Work: Identifying Issues and Needs

Group 2: Vera Evenson, Gretchen Fitzgerald, Andy Kratz, Shelby Limberis, Rebecca McLain

1. What species are being harvested in your area, both commercially and/or for personal use.

- A. Wild mushrooms
 - Boletus edulis
 - Leccinum spp
 - Suillus spp
 - Matsutake
 - Truffles
 - Chanterelle
 - Morels
 - Pleurotus
 - Cortinarius (dermocyebe) – dyes
 - Coprinus comatus
 - Puffballs
- B. Berries
 - Chokecherry
 - Serviceberry
 - Oregon grape
- C. Firewood
- D. Posts and poles
- E. Boughs
- F. Christmas trees
- G. Cones
- H. Transplants
- I. Medicinal Plants
- J. Native Seeds

[Group noted that could list species under each of the headings, but decided we didn't have time to do that; note also that the group was heavily forest service so conversation focused on management on FS lands]

2. How is the species harvested and used as a nontimber forest product?

- A. Matsutake (and in general ectomycorrhizal fungi)

People dig and rake the beds using hand tools, also some use of leaf-blowers to clear the leaves and litter; trying to get the buttons which have high value, but which are below the surface. Problem associated with harvesting is the extent to which the digging activities are damaging to the matsutake and/or other parts of the ecosystem.
- B. Transplants

Mostly people hand dig, though there are more people who are beginning to use mechanized tree spading. Commercial use is for landscaping. Species include aspen and others.
- C. Boughs

Sub-alpine fir in White River; Doug fir in San Juan NF. People collect using hand tools. Concern with sub-alpine fir boughs is over the impacts to lynx habitat i.e. removing cover for lynx.
- D. Cones

Variety of species collected. Collected by hand, for tree seed by robbing squirrel caches. The seed is then sold. Again, concerns over impacts on squirrels, which are prey for lynx.

E. Truffles

These are robbed from squirrel middens, and thus also have concerns for lynx via squirrel connection since the squirrels use the truffles to mark their cache sites.

3. Briefly describe current management practices for these species and also how general forest management is impacting these species.

A. Mushrooms

- ❑ Have a permit system for commercial and personal collection but no specific management standards and guidelines. Vera noted that many of the mycological society folks are reluctant to go in and get permits and are “closet collectors” – don’t want to be identified as collectors (and some sell their mushrooms).
- ❑ Activities that have impacts on matsutake, boletes and other mycorrhizal fungi include timber harvesting, road construction, tree spading, and other significant soil disturbances.

B. Transplants

- ❑ Have a permit system and a few standard and guidelines but they are inconsistent across administrative divisions.
- ❑ Transplants are affected negatively by elk and livestock grazing. But clear-cutting aspens can increase their numbers by stimulating sprouting. Road building also provides an opportunity for transplant harvesting, as the transplants can be removed prior to construction. Likewise with road ditch maintenance.

4. Discuss ecological, political, economic, cultural concerns.

Note: We didn’t have time to do this for each of the species identified above, so we came up with general concerns:

- ❑ Ecology: In some cases, harvesting may not be ecologically sustainable (but we don’t know much about which cases those are)
- ❑ Political: Have demands for products that the agencies may need to address; have NEPA requirements, National Fire Plan may have an effect (positive for some species and negative for others)
- ❑ Cultural: Have traditional/indigenous and recreational uses
- ❑ Economic: Small businesses and subsistence users form a large portion of those involved.

5. Identify specific information needed to manage these species as NTFPs

Note: We didn’t have much time to spend on this question so the answers are vague

- ❑ Who harvests it, what is harvested (species and parts), when is it harvested, how much is harvested, and where?
- ❑ What’s the value
- ❑ Ecological characteristics

RESULTS: Morning Small Group Work: Identifying Issues and Needs

Group 3: Maureen DeCoursey, Brenda Orth, Zachary Price, Tom Shore

1. What species are being harvested in your area, both commercially and/or for personal use.

- ❑ In Ephraim, UT (Sanpete Ranger District, Wasatch Plateau): Native Seeds (Information from seed companies)
Artemisia tridentata, *Artemisia vasejana* > 50% , Lupine > 20%, Showy Goldeneye > 5% Penstemon, Sweet anise, Indian paintbrush, columbine, snowberry, serviceberry, red elder, geranium, aster, mahogany, and chokecherry > 25%
- ❑ In Boulder County:
Fringed sage (*Artemesia frigida*), Prairie sage (*Artemesia spp.*), Pine cones, Fuelwood/chips

2. How is the species harvested and used as a nontimber forest product?

- ❑ In Utah: seeds harvested by hand for rangeland and wildfire rehabilitation.
- ❑ In CO: *Artemisia* used for incense/smudge sticks, pinecones for crafts.

3. Briefly describe current management practices for these species and also how general forest management is impacting these species.

- ❑ In Utah: permits issued (on demand) from mid-summer to fall to collect seed. Permit fees are considered a token amount, not related to market value. Only hand-held equipment allowed (generally use tennis rackets to beat the bushes to release seed into basket).

4. Discuss ecological, political, economic, cultural concerns.

Challenges/Concerns:

- ❑ Enforcement issues: Off-road vehicles, trailing, over-harvesting? Destructive harvesting?
- ❑ Coordination with other land management agencies (BLM)
- ❑ No NEPA/guidelines, management/inventory
- ❑ No staff or funding to administer NTFP management program

Opportunities:

- ❑ Reduce number of permits (instead of issuing 500 to harvesters, just issue 5 to companies)
- ❑ Increase involvement of buyers (seed companies), in order to increase accountability, and have them assume a part of management responsibility.

5. Identify specific information needed to manage these species as NTFPs.

- ❑ Need to go to D.C.- share findings and need for national strategy. Need national mandate from the Washington office to address NTFPs and develop streamlined management guidelines.
- ❑ Market information: currently have untapped markets/linkages
- ❑ Lack of contractors
- ❑ Difficult access/transport
- ❑ Huge resource not being used (negatively impacting forest health)
- ❑ Lack of government personal and money

RESULTS: Morning Small Group Work: Identifying Issues and Needs

Group 4: Bobby Joe Goggles, Wendy Holden, Eric Jones, Edward Willow

1. What species are being harvested in your area, both commercially and/or for personal use.

In the Wind River Reservation: sweetgrass, miscellaneous medicinals, ferns (personal and commercial?), pine and fir boughs, cedar, fuelwood (both personal and commercial), seeds, pine needles, Christmas

trees, mushrooms, pine cones, Aspen, chokecherry, buffalo (bull) berries, service berries, huckleberries, currants, red berries.

2. How is the species harvested and used as a nontimber forest product?

- Reach sites by: driving to collection sites, horseback, hiking.
- Collection methods: hand harvested.
- Used as: food, wine, sauces, decorations, healing, heating, ceremonial, landscaping, forage, research

3. Briefly describe current management practices for these species and also how general forest management is impacting these species.

- Permit system for both commercial and personal use.
- Gates are “controlling” access
- Homesteading restricting access
- Open access
- Grazing
- Cultivation from transplants

4. Discuss ecological, political, economic, cultural concerns.

- Grazing vs. wildlife (mostly cattle/some sheep vs. deer, elk, and sage hens/grouse, etc.
- Access to harvest areas, which is a function of homesteads and gates.
- Population sustainability
- Commercial harvest under personal use permits? Forest Service losing potential revenue.

- Mining/Oil/Gas exploration
- Off-road vehicles
- Grazing (overgrazing)
 - desecration of sacred sites, damage of sacred burial sites, resources, petroglyphs and cultural resources.
- Drought
- Water rights

5. Identify specific information needed to manage these species as NTFPs.

- Current condition of the resources?
- Effects of harvesting?
- Defining the future desired (vision)
- Create harvest areas.

RESULTS: Morning Small Group Work: Identifying Issues and Needs

Group 5: Lois Dvorshak, Trish Flaster, Juanita Ladyman, Susan Spackman Panjabi

1. What species are being harvested in your area, both commercially and/or for personal use.

Code:

FL	Flower	RO	Root	SE	Seed	LE	Leaf
AE	Aerial parts above ground			WP	Whole plant	FB	Fruiting body

Medicinals:

Osha	RO	Arnica	LE
Usnea	WP	Ligusticum	RO
Lomatiums	RO		

Others

Ocotillo	WP/AE	Craft, Horticultural
Night blooming cactus	WP	Medicinal
Yucca	RO, WP, FL	Medicinal
Cacti	WP	Horticultural
Pinyon nuts	SE	Food
Fungi	FB	Food
Aspen	WP	Craft, Medicinal, Horticultural
Penstemon	SE	
Ephedra	LE, AE	
Thelasperma (navajo tea)	LE, AE	
Seeds of native plants		

2. How is the species harvested and used as a nontimber forest product?

- Mostly hand harvested; see above for parts used

3. Briefly describe current management practices for these species and also how general forest management is impacting these species.

- Prescribed burns and other fires – can be detrimental to some species or beneficial to others
- Grazing by livestock – can increase exotics, can decrease native diversity
- Herbicide treatment and biocontrol --- can decrease native diversity

4. Discuss ecological, political, economic, cultural concerns.

- Overharvesting
- Impact on ecosystem
- Priorities of use
- Balance human needs with ecological needs

5. Identify specific information needed to manage these species as NTFPs.

- Biological information:
 - pollination biology
 - reproductive ecology
 - range/abundance of species
 - animal dependence
 - cultivation ability
 - active ingredients

DIRECTIONS: Afternoon Small Group Work: Developing Pilot Projects

Introduction: “For many NTFPs, inventory methods do not yet exist and pilot studies are needed.”

Working from the information gaps and needs identified in the morning, we are now going to brainstorm and put our collective experiences together to address those needs, by developing pilot project proposals. Right now, I want you to think big- looking at the needs, the political, economic, cultural issues - to develop the best proposal you can. If you were in charge, if you could develop your ideal program, what would it look like?

Activity:

- ❑ Divide into groups of 3-5, depending on product of interest. Choose one person to record summary of discussion on flipcharts, one person to present in the plenary, and one person to keep an eye on time and keep the group moving.
- ❑ Discuss the questions below and brainstorm ideas and identify concrete "next steps". Don't worry if you can't answer a question—these are general and meant to be guiding questions. If you get stuck, move on and come back to it if you have time.
- ❑ Once finished, hang flipcharts on wall, and review in plenary.

Initial Design Considerations:

1. What are the project goals, objectives, research questions?
2. What data already exist and are they adequate?
3. What new data needs to be collected and how will it answer the project goals?
4. What form will data collection take (observation, test plots, herbarium vouchers, etc.)?
5. Can several products or species be inventoried and monitored at once?

Who is Involved:

6. Who will collect the data (how, when, where, how often)?
7. Will data collectors require training and who will provide it?
8. How will the data be analyzed and who will do it?
9. How is data validity provided?

Biological/Ecological Considerations:

10. What is the biological life form of the species (tree, shrub, herb, bryophytes, lichen, fungi), reproductive strategy, part harvested (root, leaves, bark, fruit, seed), and when is the product visible and identifiable?
11. For multi-species approaches, how do sampling techniques vary for the different species?
12. What is the scale of the study area (e.g. country, state, watershed, bioregion)?
13. How is the species population distributed across the area of interest?
14. How do temporal factors (e.g. seasonal variations) affect the data being collected?

Other Considerations:

15. Is product processing, transportation, and storage an important consideration?
16. Will commercial product yields be estimated? How will this be done?
17. How will inventorying and monitoring affect current users/harvesters in your research area?
18. What is an acceptable balance between accuracy and overall cost of the project?
19. If it is a long-term monitoring project: how will the data be archived? What institutional arrangements exist for continuity?
20. How will the project be funded?
21. Other?

Results: Afternoon Small Group Work: Developing Pilot Projects

Group 1: Lois Dvorshak, Brenda Orth, Zachary Price, Tom Shore

Initial Design Considerations:

Objective:

- Identify wildflower species (pressed, used in candles, books) that are of concern

Existing Data:

- ?

New Data:

- How much is being harvested?
- How are they being harvested?

Who is Involved:

- Harvesters- both recreational and commercial- who come in for no-cost permit will help provide documentation on volume, species, location.
- Community involvement- volunteers

Biological/Ecological Considerations:

- Multi-species project
- List plants that are OK to pick
- Limit picking in certain areas/viewsheds
- Perennial plants are better than annual plants

Pilot Design:

- Geographical scale- start with one area
- Time frame: only certain times of the year (at bloom)
- Plots/line intercept for browse
- Random plots for floristic inventory
- Photo points at full bloom

Other Considerations:

- Incentives to encourage reporting- to get harvesters to collect and return information.
- Provide education through/during permitting processing.
- Money from permits goes into educational material/incentives for harvesters to participate (like pizza at meetings, etc.)
- Video cameras
- GIS archive
- Volunteer Naturalist Program- free training for data collection

Results: Afternoon Small Group Work: Developing Pilot Projects

Group 2: Gretchen Fitzgerald, Shelby Limberis, Rebecca McLain, Susan Spackman Punjabi,

Goal of the pilot project

To maintain viable populations of NTFP species, which are collected in a designated area. This requires setting up a program to detect true declines in the population, as well as detecting how harvesting practices/activities are affecting the population of the species in the designated area. (note that harvesting could have positive, negative or no effect).

1. Select the area for which you want to set up an I and M program – could be a FS district, a National Forest, the land owned by a private landowner, etc.
2. Develop a master list of all the NTFPs that are gathered in the area
3. Gather existing information on those NTFPs. Purpose of this is two-fold: a) to learn more about what the issues are and b) to increase awareness of a variety of stakeholders about what is happening.
4. Develop a list of species of concern or priority for monitoring (perhaps starting with five or so; don't want too many or it becomes overwhelming very quickly). These are species that you want to target for monitoring and conservation.

- ❑ Establishing Priorities or Species of Concern: This would involve asking questions along the following lines for each of the NTFP species on the master list.

- How is it harvested?
- What potential effects does harvesting have on other species?
- How does the species reproduce?
- What are the market values or demand levels?
- What are the treaty rights issues?
- Can the species be cultivated? (i.e. are there alternative sources)
- What is the species' range and abundance within the study area?
- What is the species' range and abundance outside the study area?
- What other activities are also affecting that species?
- What is the role of that species/product in the bio-cultural system for that area?

- ❑ Note: This would be done as a joint effort between researchers, agency professionals, and community/harvesters. An example of how community groups have been involved in mapping a resource was provided by Gretchen – i.e. the San Juan Citizens Alliance which mapped out areas of old growth to be management priorities.

5. Identify information gaps (for species of concern, but also for some of the other species if the information gathered indicates that more needs to be known in order to evaluate what is happening with that species)

- ❑ Note: In all of the above steps, an interdisciplinary approach involving the participation of a variety of specialists and community members/other stakeholders would be used.

6. Map the true distribution of the species of concern; also abundance (total abundance and abundance of collectible quality)

- ❑ Mapping of species is an activity that can be politically difficult to accomplish. We noted that community members and/or harvesters are often unwilling to have things mapped because they don't want everyone else to know about their gathering sites. One suggestion for addressing this concern consisted of identifying key community members involved with the monitoring who could serve as the "holders of the maps" so that not everyone would have access to information many would prefer not to be made readily available.
- ❑ This inventory/mapping process would be a collaborative effort between scientists and community members or key concerned harvesters. Scientists would provide training. Could have youth involvement.

7. Monitoring

- ❑ Monitoring would be done as a joint effort between users and scientists. The first step would be to develop a set of questions regarding characteristics of NTFP plants that are harvested and not harvested. This information would be collected by harvesters, volunteers and agency people. These questions would include the following:
 - Are there young plants?
 - Are there signs of use by wildlife, insects, etc.
 - Does it produce berries, fruits, cones, flowers, seeds every year?
 - Are adults vigorous or dying?
 - Is there a mix of size and age classes?
 - Is it harder or easier to find the product now than in the past?
 - Does this place “feel” like it is “okay” or does the site “feel” impacted or degraded?
- ❑ Frequency: once a year
- ❑ Checks: use of photo points. Each area would be accompanied with a photo to provide a cross check and additional information to the information gathered.
- ❑ Additional components: education of harvesters/communities/scientists – workshops, brochures etc.
- ❑ Monitoring would be carried out primarily by “site stewards” who pass through the area on a frequent basis during the year as part of their every-day activities.

8. Adaptive management approach

- ❑ Go back to step 1 every 5 years or more frequently if additional information surfaces to indicate that the species of concern list needs to be revised.

Results: Afternoon Small Group Work: Developing Pilot Projects

Group 3: Vera Evenson, Susan Johnson, Karl Mendonca, Tom Shore

Project Goals and Objectives:

1. To evaluate the effects of fire on NTFPs – wildfire,, prescribed fire, fire use [?]
2. To utilize knowledge to design prescribed fire to provide NTFP opportunities.

Project would focus on one or more of the following NTFPs/species according to harvester demand and interests:

- ❑ morels
- ❑ fireweed
- ❑ grasses
- ❑ flora
- ❑ berries
- ❑ noxious weeds
- ❑ Threatened and Endangered Species (T&E) species

Program Elements:

1. Existing data/processes to draw upon
 - ❑ fire history
 - ❑ wildlife database
 - ❑ prescribed fire modeling
 - ❑ existing post-fire mushroom monitoring
 - ❑ public scoping
 - ❑ TES monitoring
 - ❑ treaty rights

- local herbaria
 - timber stand inventory
 - environmental laws
2. New data/processes to undertake
- designation of vegetation/spp to be monitored pre and post fire
 - develop protocols for monitoring
 - host field trips, engage community, interest groups, etc.
3. Forms of data to gather
- on-ground observations (inventory plots and surveys)
 - interviews
4. Who to Involve
- fire/fuels specialist
 - botanist
 - NTFP harvesters/users
 - volunteers
 - universities (local)
 - biologist
5. Biological/Ecological Considerations – (using morels as an example)
- Type of organism: fungi
 - Part harvested: fruiting body
 - Time of harvest: spring post-fire
 - Scale of project: to be determined and responsive to public interest
 - Distribution: variable
 - Temporal factors to consider: pre and post fire (immediately after fire, spring after fire, 1st year, 2nd year, etc.)

Results: Afternoon Small Group Work: Developing Pilot Projects

Group 4: Bobby Joe Goggles, Wendy Holden, Eric Jones, Edward Willow,

Initial Design Considerations:

Objectives:

- Obtain basic information on fiddleheads
- Monitor fern harvest effects on species population (to ensure that no adverse effects to plant populations).

Existing Data:

- We know permits are issued, so can make assumption about total harvest (in bushels)
- We know harvest areas.

New Data:

- How many individual fiddleheads are in a bushel?
- How big of an area does it take to fill a bushel?
- For population health assessment, compare harvest areas to non-harvest areas: height, weight, color, spores, and presence.

Who is Involved:

- Harvesters/Monitors

There are barriers to harvester participation:

- Fear of prompting regulation.
- Would need to do data collection at time of harvest (less time to work = less collected= less money)
- Could be enterprise opportunity in areas in need of work training.
- Forest Service lacks staff, has to rely upon voluntary participation.
- Could possibly contract out work if had the funding.
- Could develop a youth program (paid or certificate program)
- Mobile youth group- once trained here could travel around region and help set up these monitoring programs in other areas.

How is data validity provided:

- Double checks- site visits by botanists
- Duplicate data collection in a % of area
- Paying people may increase reliability
- Create a job where people feel pride in what they are doing/ that they are making a difference
- Project design: rigorous statistical design developed in collaboration with ecologist/botanist, etc.
- Test plots: inside and outside harvest areas.
- Take measurements two times/week for 8 weeks; then one time/week in weeks 9-12.

Biological/Ecological Considerations:

Life form: rhizomes/spores/vegetative palynology

Soil Samples: isolate spores and pollen, quantify to determine change over time in species composition

Geographic Scale:

- Isolate level of watershed where ferns occurs in mosaic association with Aspen, oak/grass woodland/coniferous interface.

Time Scale:

- Depends on seasonal moisture availability and length of wet season in each year.

Other

- Literature review: check other sources for fern population studies
- Visit Asian community markets to see if fiddleheads available, prices, etc.
- Document preferences for preparation/storage preferences.
- Designed to ensure and validate that the Forest Service fiddlehead program is not having an adverse effect on the population.

Results: Afternoon Small Group Work: Developing Pilot Projects

Group 5: Maureen DeCoursey, Gary Finstad, Andy Kratz, Juanita Ladyman

Public/Private and Mix!

1. Make master list of priority/target species (pilot)

- Abundance
- Distribution
- Age
- Condition of site of species

2. Selection Criteria

- ❑ Plant in highest demand
- ❑ Rarity
- ❑ Resource conflict
- ❑ Plant part harvested (e.g. root versus leaves; perennial root collection of higher priority than leaves)
- ❑ Accessibility to product/market etc. as determined by stakeholders/coordinator

By determining sustainable year

- ❑ "Desktop" Study
 - culture
 - biology
 - ecology yield studies

3. Social Interviews

- ❑ Permit Review
- ❑ Ethno-botanical review
- ❑ Stakeholders

4. Method

- ❑ Rapid Ecological Assessment vs. Comprehensive Assessment
- ❑ Who Involved
 - Forest District Botanist
 - Heritage Botanist
 - Private Contractor Botanist
 - Seasonal hire-botanists
 - garden clubs
 - native plant soc.
 - local community groups / schools
 - harvester
 - university graduate / undergrad students

5. Series "Stakeholder" Workshops to Determine Level of Involvement

- ❑ Non-agency (neutral) coordinator
- ❑ High level community participation
- ❑ Training- done by agency or other professional
- ❑ Sufficient numbers to adequately cover area
- ❑ Species must be 100% accurate ID
- ❑ Define high/medium/low abundance and then base inventory or abundance of plant part / product

Final Discussion

I & M Design Issues:

- ❑ Important questions to ask: How do you identify study plots? And what are the consequences for the users/harvesters?
- ❑ Analyze existing permit system, and figure out how to get the bigger NTFP industry more involved and accountable.

Education Needs:

- ❑ We need to fund education efforts to educate community, land managers, colleagues in our own offices about the importance of NTFPs.
- ❑ Need to include NTFPs in Forestry School curriculums.
- ❑ Involve harvesters in developing education programs for other harvesters (example of creating videos)

Policy and Funding Issues:

- ❑ Fair market value issues and Section 339- Code of Federal Regulations should be coming out soon and we can offer comments. Frank Duran, Region 6, is person to contact for more information.
- ❑ We need to develop a NTFP Strategy/mandate from D.C. office. Then we can develop species specific guidelines- since some forests are ignoring NTFPs.
- ❑ Explore how to obtain KV Funds (Forest Service) for managing NTFPs. This might be mechanism to help manage NTFP program, since KV funds allow a district to keep some of the money they receive from permits in their district to manage their program.

Networking Opportunities:

- ❑ Network/More Information:
 - ❑ Alliance of Forest Workers and Harvesters. Eugene, OR. Contact: Jennifer Webster, Assistant Coordinator. office@alliancefwh.org or 541-342-6146.
 - ❑ PNW Special Forest Product Council. Forest Service, Region 6 and BLM collaboration. Contact: Jerry Smith at (541) 536-2983, grsmith@fs.fed.us or John Hegg at 541-683-6644 jhegg@or.blm.gov Website: www.edo.or.blm.gov/nsfpc

Potential Models/Opportunities:

- ❑ Stewardship Contracts as possibility?
 - Need permission of congress? Goods for services issues.
 - Pre-commercial thinning-pilots
- ❑ 3.5 contracts (product contracts). Karl Mendonca discussed these from experiences in Region 6. Offered to provide a copy to all.

Workshop Evaluations Results

1. What did you like, or find useful, in today's workshop?

- Education, networking, hearing common issues.
- Networking, introduction information for those who are less educated on these topics.
- Networking; new ideas.
- To learn how they are trying to protect our medicinal plants.
- Break out session were effective and Katie facilitated with grace and elegance.
- Small group discussions.
- Small group discussion, meeting interesting people and learning about local NTFPs.
- Good mix of people and interests.
- Group discussion and the initial short presentations to get our juices flowing and brains thinking, plus the networking opportunities.
- The entire discussion was illuminating; plus meeting others in pursuits I had no idea were economically viable.
- Good exchange of ideas; finding out more about regulations was particularly interesting to me.
- I enjoyed meeting other people and hearing about their role or interest in NTFPs.
- The presentations were informative (Rebecca went really fast and Eric went really slow).
- Exposure to different perspectives—botanists, private, interagency land management agencies.
- I liked looking at the issue from a regional approach. I gained further insight by talking/listening to others and how they were handling their programs with the different products involved.
- I liked the discussion on community-based monitoring programs for NTFPs. It was new information for me.
- I thought the brainstorming group work was valuable. It was good to hear other people and other disciplines views on NTFPs.
- I appreciated the “world-view” approach, and provided excellent definitions of NTFPs and good suggestions from Eric on the databases.

2. What needs improvement?

- Need more harvester viewpoint
- Better communication among the races—for example between whites and Indians.
- Maybe develop a handout on how to get involved politically ie. addresses, phone numbers, dates.
- More involvement of harvesters in workshop and information on buyers would be useful
- More harvesters involved and more specifics with “strategies”
- Presentation of case studies
- Involve more harvesters and leave more time for work in breakout groups with maybe more specific guidance?
- Make sure to keep initial presentations by facilitators brief. Most of us came to this workshop to network and discuss ideas, not sit in lecture.
- Nothing I can think of.
- The participants were “federal agency top-heavy.” I don't mean too many agencies, just not enough “others.” Maybe hold the meeting in a non-government venue.
- I believe some harvester's perspective would be invaluable. If I had understood that this meeting should have included them, I think I could have had some come.
- Help the small groups narrow down so that the discussions can be more productive, or give more time.
- ?
- This was a well thought out workshop, inclusive agenda, great presentations, beautifully executed.
- The morning exercise should be more specific, it was hard to think about all the questions given. Or make the activity longer.

- Although efficiently done and very interesting, noted attention lagging during “lectures” in A.M., but great energy in small groups.
- Need more Indian people aware of what is going on.

In General:

- Development and coordination of a regional NTFP program, and a better understanding of regional demand, supply and sustainability of NTFPs. Development of working/cooperative relationships with harvesters, professional plant societies and universities.
- After a National Strategy is developed, then we need to be specific as to seed picking, healing plants, other products, etc. Some programs will be relatively simple to develop, others will be much more complicated. It is imperative that NTFPs be addressed in the revisions of ALL Forest Plans and BLM Land Management Plans. This policy should come forward immediately from the Washington office. I know that some forest do not intend to address this issues, based on meeting that I have recently attended.

3. Were your expectations for the workshop met? If not, why not, and how could we do better?

- Yes.
- Yes.
- Yes.
- Yes.
- Yes.
- Yes!
- Yes, thanks.
- Yes, thank you!
- Yes, I thought it was worthwhile.
- Yes, I came to learn all I could about NTFPs.
- Yes, I learned so much about community involvement, also about the diversity of NTFPs.
- Yes, but I do wish harvesters were present to give their input.
- Yes, except that I had thought more harvesters would come. Maybe that is simply unrealistic.
- Yes. I didn't think I would walk away with all the answers, but it was good to hear how others were dealing with NTFPs. It was good to have the group discussions on how to approach monitoring.
- My expectations (to get a better understanding of issues, concerns, and opportunities associated with NTFP within the region) were met, although the Region has a long way to go to effectively manage NTFPs. Take advantage of interest in NTFPs.
- Sort of. I still don't know how to find out what is a sustainable harvest or what the affects of harvesting are. I guess there are no answers.
- I thought that the presenters were going to teach us.

4. Other Comments? Criticisms? Opinions? Insights? (Feel free to use more paper)

- Great, I loved it.
- I would like to know about how it is going to progress, later on.
- We need more involvement of the Native Americans.
- Excellent food, enthusiasm from presenters, probably less relevant to smaller agencies.
- Very interesting, I look forward to receiving the summaries of all the pilot projects developed today.
- It would be helpful if you compiled a list of species that are being harvested in the region. A complete list would be great, but even an incomplete list/subset would be great. Include Latin and common names and leave room for notes.
- Keep it up, and get the results posted on the web.
- Loved the power-point presentations! (but please do not try to put all the info on a few slides).
- Thanks for the free workshop. I couldn't attend if there had been a cost.

- ❑ Katie is a “smooth-as-silk facilitator”, and I was impressed with the knowledge and communication ability of all three of you (Eric, Rebecca and Katie).
- ❑ Our group spent a long time deciding what the “pilot project” meant. I think more specific objectives to the discussion would be helpful in generating more specific ideas. I don’t think at anytime we discussed the third objective of the workshop (including harvesters in I & M) in any depth.
- ❑ During the introductions, have everyone name one forest product they are particularly concerned about.
- ❑ During the first group discussion, assign or have groups pick one NTFP of concern to explore.
- ❑ During the beginning, shorten presentations and have group define NTFPs they know are collected for that large list. I was interested in the local differences.
- ❑ Have a small presentation by a traditional user (healer, tribal member, something about issues).
- ❑ Laws and policies affecting NTFPs came out at the end. Maybe develop a handout or discussion on this, but I know it is hard to include it all.
- ❑ Terrific food and general presentation and attitude.
- ❑ Provide a resource guide as part of the course materials.
- ❑ It would be good to meet with harvesters. Perhaps units in subsequent regions could invite/solicit their “known to be cooperatively involved” harvesters to participate?
- ❑ Given the inexperience in the Region, it would be helpful to present more case studies.
- ❑ I think the Agencies are at least 10 years behind the curve. There is no consistency. Attempts to do this have been ineffective. USDA came out with a pamphlet “National Strategy for Special Forest Products” but it only addressed the need for a national strategy and the parameters that needed to be built into programs/policies. A good start, but finishing is the tough part.
- ❑ Talking about collaborative efforts and using harvesters to collect data provided good starting points for projects.
- ❑ So many new ideas! I hope for follow-ups.

IFCAE response: Thank you all for your candid and useful comments. We will definitely use these to improve upcoming workshops. To respond to some specific suggestions/comments:

Re: Harvester participation. We wanted to let you know that we do have funds set aside for harvester involvement, and did offer to cover expenses for harvesters to attend. Our research design involved being in the field for about a month talking with harvesters before the workshop. It was their comments we shared at the beginning of the workshop (and we will make it clearer in future meetings by using quotes from harvesters). Even with this concerted effort, we have had little success in getting harvesters to meetings. Our take home message from this is that formal meetings may not be the best way to involve harvesters. We anticipated this, and that is exactly why we are spending most of our time in the field talking with harvesters.

Re: Communication among the races—for example between whites and Indians. We agree. We sent out invitations to all the Tribes in our research area, but were not able to create much dialogue yet. We are working on this. Any suggestions or assistance here is most welcome.

Re: Developing a handout with useful information so you can get involved: We will do that! Thanks. (*Postscript: we did do this, and it is now posted on our website*)

Re: Presentation of case studies. We had hoped to do this as you can see on your agenda. Unfortunately, the folks who were going to present case studies backed out at the last minute. However, we will work on this for future meetings! (*Postscript: we did follow your suggestion for all three other meeting, and these case studies are going to be part of our final report. Look for them in January 2004*)

Re: Location of meeting. We will try to mix it up to be sure to get a varied group of participants. Thanks.

Re: Small group work logistics. We will continue to refine these! Thanks everyone for working with us as we develop these activities.

Re: Follow-up information. We will send you an email when we finish the other workshops, so you can see who participated and what they had to say about these ideas. Likewise, we will let you know when final reports are available. On the flip-side, we hope you all continue to share with us and the group any new developments in your region or organization regarding NTFPs. Please feel free to email us, and if we can help facilitate collaborations or dialogues let us know.

You are invited to a special one-day workshop

Harvester Involvement in Inventorying and Monitoring of NonTimber Forest Products

Date: Thursday, February 27, 2003

Time: 8:30 am to 5:00 pm

Location: USDA Forest Service Region 8 Office
1720 Peachtree Rd, NW. Atlanta, GA

Geographical Focus: TX, AR, LA, MS, AL, GA, FL, SC, NC, VA, KY, TN, MD, DE

Purpose of the Workshop: To bring together those people interested in the sustainable management of nontimber forest products—including federal, tribal, state, and private land managers, policy makers, scientists, buyers, and harvesters—to explore how harvesters might participate in a comprehensive biological monitoring program.

Context: This workshop is part of a national study funded by the National Commission on Science for Sustainable Forestry (NCSSF). www.ncssf.org

Registration: This workshop is free and open to the public. *However, pre-registration is requested. Please contact Katie Lynch no later than February 20, (503-320-1323, ktlynch@ifcae.org).

Organized by the Institute for Culture and Ecology

www.ifcae.org • 503-320-1323 • PO Box 6688 Portland OR 97228

PLEASE DISTRIBUTE WIDELY

**Special One-Day Workshop:
Harvester Involvement in Inventorying and Monitoring of Nontimber Forest Products**

Thursday February 27th, 2002 8:30am—5:00pm
USDA Forest Service, Southern Region Headquarters
Atlanta, GA

Workshop Objectives:

By the end of the workshop, participants will be able to:

1. Illustrate the need for inventory and monitoring efforts of nontimber forest products (NTFPs);
2. Discuss some of the political, economic, and social issues surrounding the inclusion of harvesters in an inventory and monitoring program of NTFPs;
3. Discuss several strategies for including harvesters in inventorying and monitoring;
4. Build networks with other stakeholders in the region with an interest in NTFPs.

Workshop Agenda:

8:30 – 9:00	Registration and Breakfast Mingling
9:00 – 9:25	Welcome and Group Introductions
9:25 – 9:30	Overview: Workshop Objectives and Agenda
9:30 – 10:30	Presentations: NTFPs, Harvesters, Inventory and Monitoring
<hr/>	
10:30 – 10:45	Morning Break
10:45 – 11:15	Small Group Work: Identifying Issues and Needs
11:15 – 12:00	Plenary Presentations and Discussion: Identifying Issues and Needs
<hr/>	
12:00 – 1:00	Lunch
1:00 – 1:30	Presentations: Case Studies and Group Discussion
1:30 – 3:00	Small Group Work: Developing Pilot Programs
<hr/>	
3:00 – 3:15	Afternoon Break
3:15 – 4:30	Plenary Presentations and Discussion: Pilot Programs
4:30 – 4:45	Final Wrap-Up and Evaluations

Participant List

Special One-Day Workshop: Harvester Involvement in Inventorying and Monitoring of Nontimber Forest Products

Thursday February 27th, 2003
USDA Forest Service, Southern Region Headquarters, Atlanta, GA

Kathy Andregg

Regional Timber Mensurationist
USDA Forest Service, Region 8
1720 Peachtree Road NW, Atlanta, GA 30309
Tel: 404-347-3964 Fax: 404-347-4154
kandregg@fs.fed.us

Marianne K. Burke

Research Ecologist, USDA Forest Service
Southern Research Station
Center for Forested Wetlands Research
2730 Savannah Highway, Charleston, SC 29414
Tel: 843-766-0371 x118 Fax: 843-766-8734
mburke@fs.fed.us

Sharon Clarke

Cultural Projects and Communications Manager
Resourceful Communities Program
The Conservation Fund
P.O. Box 271, Chapel Hill, NC 27514
919-967-2223 Fax: 919-967-9702
sharonclarketcf@earthlink.net

Elizabeth S. Crane

Forest Legacy Program Manager
USDA Forest Service, Region 8
1720 Peachtree Road NW, Atlanta, GA 30309
404-347-5214 Fax: 404-347-2776
ecrane@fs.fed.us

Jennifer Cruse-Sanders

Graduate student, University of Georgia
Plant Biology Department, Plant Sciences
Rm. 2502, University of Georgia
Athens, GA 30602
706-542-0281 Fax: 706-542-1805
cruse@dogwood.botany.uga.edu

Dennis Desmond

Forestry Program Coordinator
The Land Trust for the Little Tennessee
PO Box 1148, Franklin NC 28744
Tel: 828-524-2711 Fax: 828-524-4741
lilt_forest@dnet.net

Edward Fletcher

Chief Operating Officer, Strategic Sourcing, Inc.
115 Snow Ridge Rd, Banner Elk, NC 28604
(828) 898-7642 Fax: 828-898-7647
efletcher@skybest.com

Carol Haack

Associate, Appalachian Forest Resource Center
20 Battery Park Avenue, Suite 611
Asheville, NC 28801
(828) 281-7194
carolh@appalachianforest.org

Rick Hatten

Forest Stewardship Program Coordinator
Georgia Forestry Commission
PO Box 819, Macon, GA 31202
478-751-3491 Fax: 478-751-3465
rhatten@gfc.state.ga.us

Tony Hayes

President, Ridge Runner Trading Co., Inc.
P.O. Box 391, Boone, NC 28607
828-264-3615 Fax: 828-262-3605
herbalogic@yahoo.com

Gary Kauffman

Forest Botanical Products Specialist
National Forests in North Carolina
PO Box 2750, Asheville, NC 28802
(828)-257-4861
gkauffman@fs.fed.us

Mike Nicolo

Sales Forester
USDA Forest Service, Cherokee National Forest
P.O. Box 2010, Cleveland, TN 37312
423-476-9700 Fax: 423-476-9747
mnicolo@fs.fed.us

Mark Pistrang

Forest Botanist/Ecologist
USDA Forest Service, Cherokee National Forest
P.O. Box 2010, Cleveland, TN 37312
(423) 339-8645 Fax: (423) 476-9747
mpistrang@fs.fed.us

Robin Suggs

Executive Director, Yellow Creek Botanical
Institute, Inc.
P.O. Box 1757
Robbinsville, NC 28771
828-479-2788
rsuggs@graham.main.nc.us

Institute for Culture and Ecology Team:

Kathryn Lynch

Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-320-1323 (cell), 503-331-6681 (office)
ktlynch@ifcae.org

Eric Jones

Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-320-1323 (cell), 503-331-6681 (office)
etjones@ifcae.org

Rebecca McLain

Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-331-6681 (office)
mclain@ifcae.org

Regional Liaison:

Sarah Workman

Assistant Professor, University of Florida
Center for Subtropical Agroforestry
Bldg. 191, Mowry Road
P.O. Box 110831
Gainesville, FL 32611-0831
352-846-3496 Fax: 352-846-2094
sworkman@ufl.edu

Graduate Assistant:

Brian Becker

MS Student - Agroforestry
University of Florida
350 Newins-Ziegler Hall
PO Box 110410
Gainesville, FL 32611-0410
352-846-0888
brbecker@ufl.edu

DIRECTIONS: Morning Small Group Work: Current Inventory and Monitoring Efforts

Activity:

- ❑ Divide participants into groups of three to five, depending on number of participants/room.
- ❑ Have each group designate a recorder, to write responses on flipcharts, and a presenter, to share results with whole group.
- ❑ Task each group with discussing the following questions.
- ❑ In the directions, stress that the following activity is relevant to all landownership types, from feds, to state, to private lands.

1. How are NTFPs inventoried in your area?

(describe which species are included, methods used, and who does the work. Is it adequate?)

2. How are NTFPs monitored in your area?

(describe which species are included, methods used, and who does the work. Do they monitor the impacts from: a) harvesting, b) regulatory and c) non-regulatory management activities? Is it adequate?

3. Discuss any experiences you have had with inventory and monitoring (of any resource) that may be relevant to NTFPs.

Small group facilitators note:

Your task is to keep the group focused, productive, and to create space for everyone to contribute. If your group starts getting off topic, gently bring the group back on task. There are two questions for this exercise, so keep track of time (in a non-obvious way) and at fifteen minutes or so, gently try to get the group to move to the next question (at an appropriate moment). You can say things like, does anyone have any final comments for this question? Or if no one has any final comments for this question, let's move on to the next question.

Question 3. The distinction here is PERSONAL EXPERIENCE, and the fact that they may have I & M experiences regarding other resources. So we want to explore these past experiences, see what we can learn from them that might be relevant for NTFPs. Have them go into detail: how was it set up, who did the work, what type of data, when, where, where users involved, etc.

Extra question, if your group gets done early: How do harvesters in your area contribute knowledge (or skills) about NTFPs that helps resource managers manage these resources?

Results: Morning Small Group Work: Current Inventory and Monitoring Efforts

Group 1: Kathy Andregg, Brian Becker, Liz Crane.

1. How are NTFPs inventoried in your area?

(describe which species are included, methods used, and who does the work. Is it adequate?)

- There are state inventory schemes for threatened and endangered species and wildlife resources
- USFS train forest technicians and ‘groundpounders’ to identify and make note of understory plants during fieldwork i.e., timber marking
- USFS has partnerships with organizations such as The Nature Conservancy, Trust Public Lands, The Conservation Fund, etc. to assist with inventoring and monitoring
- USFS Research – Southern Forest Resource Assessment
- However, there is limited contracting from appropriated dollars

2. How are NTFPs monitored in your area?

(describe which species are included, methods used, and who does the work. Is it adequate?)

- Counting number of permits issued
- Some permanent plots have been established
- Knutesen-Vandenburg funding is used for monitoring impacts from harvest activities. This avenue is limited though, since only specific plants are monitored in relation to timber harvesting.
- End-of-year law enforcement reports of ticketing/convictions
- Also, see answers to #1.

3. Discuss any experiences you have had with inventory and monitoring (of any resource) that may be relevant to NTFPs.

- During the 1970s and 80s, the Forest Service had more of a liquidating resources mindset
- State inventories/monitoring activities happen when there is a land use change i.e., when urbanization takes place (count stuff before the bulldozers come)
- An incentive to monitor National Forests is the threat of or actual lawsuits
- State incentives to monitor tend to be economic i.e., hunting generates money, so we count deer
- The byproduct of USFS research sometimes results in I & M i.e., nutrient impact from pine straw harvest (productivity)
- Pine straw off of state land is reported ‘stolen’ – people not getting permits
- Stewardship contracting can result in monitoring
- New landowners not having ‘agreements’ with harvesters, more and is now being managed by TIMO’s (Timber Management Organizations) who want money for all products
- A lack of infrastructure/legal leases for NTFPs exist – we don’t know who the harvesters are or what the products are on our land
- Socio-economic biases – collectors are often from minority or lower economic communities, so landowners, managers, and researchers may have problems communicating with these groups.

Group 2: Marianne Burke, Dennis Desmond, Edward Fletcher.

1. How are NTFPs inventoried in your area?

(describe which species are included, methods used, and who does the work. Is it adequate?)

- In North Carolina: US Forest Service: Black cohosh and bloodroot monitoring efforts, including Gary Kauffman, Edward Fletcher and other specialists with Garden Club volunteers, on National

Forests. It is an annual inventory and monitoring. Also harvest impact studies involved. Methods include transects and indicator species. This will be an ongoing project with annual data collection of specific plants including regeneration data from harvest impact studies.

- ❑ In Charleston, S.C.: sweetgrass stakeholder survey.
- ❑ In southwest North Carolina: developing forest type prediction models, which can guide inventory protocols.

2. How are NTFPs monitored in your area?

(describe which species are included, methods used, and who does the work. Is it adequate?)

- ❑ Ginseng: monitored by each state. Buyers collection permits, listing quantity, county, township, etc. Information sent to US Fish and Wildlife Service.
- ❑ On national forests: permits are often only means of monitoring. Reports afterwards summarize the data. Patrolling and checking permits is another way to monitor.

3. Discuss any experiences you have had with inventory and monitoring (of any resource) that may be relevant to NTFPs.

- ❑ Research correlating environmental parameters.

Group 3: Jenny Cruse-Sanders, Rick Hatten, Tony Hayes, Mark Pistrang, Rebecca McLain

1. How are NTFPs inventoried in your area?

(describe which species are included, methods used, and who does the work. Is it adequate?)

- ❑ Inventories of NTFPs are done as an incidental part of larger inventories, such as inventories of threatened and endangered species. Ginseng is one species that is tracked widely in the south, but no other NTFP species are. The Cherokee National Forest tracks the number of permits that it issues for all products. In terms of the inventories that the Cherokee NF does, they bid out the surveys using open-ended contracts. The contractors provide a list of who will be doing the work and what their qualifications are. Thus far, the quality of the surveys has been quite good.

2. How are NTFPs monitored in your area?

(describe which species are included, methods used, and who does the work. Do they monitor the impacts from: a) harvesting, b) regulatory and c) non-regulatory management activities? Is it adequate?)

- ❑ Tracking of NTFP permits sold on the Cherokee NF is done annually. However, it is unknown to what extent people who harvest actually obtain permits, and law enforcement is spotty.
- ❑ Pine straw is now monitored in Georgia at the state level, which recently passed a law requiring pine straw harvesters to have written permission from the landowner in order to harvest and transport pine straw. However, enforcement of the law continues to be spotty.
- ❑ Although the Forest Service managers have some concern about those who obtain permits, the bigger concern is the amount of unpermitted gathering that takes place on national forest lands.
- ❑ One reason that gatherers may not be getting permits is that obtaining a permit does not guarantee that they will obtain a given amount of the product they are seeking. Rather, the permit only

gives the holder “hunting” rights for the product. People are reluctant to pay for a permit without assurance that they will get something for their money.

- ❑ We need to take the permit data with a large grain of salt. First because many people don’t get permits, but second because people who get a permit for one product may be gathering other products as well. For example, if a person has a permit to gather black cohosh in July, before the ginseng season starts, s/he most likely will harvest ginseng if s/he sees any while in the woods, even though it is not yet ginseng season.

3. Discuss any experiences you have had with inventory and monitoring (of any resource) that may be relevant to NTFPs.

- ❑ Low-level monitoring is done for ginseng and ramps on the Cherokee National Forest. In the case of ramps, the forest no longer requires permits due to the high numbers of people who gather ramps and the inability to process the data the forest was receiving. However, the forest managers were able to identify key gathering areas, and set up some monitoring plots in those places. They’ve been doing 30 meter transects in these key areas over the past two years, using techniques that allow them to track the changes in individual plants. The data is rough, but it does provide some feel for what changes are taking place over time.
- ❑ Participants noted that it is really important with monitoring programs to have an overall framework in place for doing something with the data that is gathered. For example, the Georgia Natural Heritage program has 10 years of data that it gathered on ginseng, but which was never analyzed. The data is now sitting in a box, and nothing has been done with it.
- ❑ Participants noted that many gatherers and buyers have extensive knowledge of the qualities of ginseng – some are able to tell very precisely where the ginseng comes from on the basis of its physical qualities.

Group 4: Sharon Clarke, Carol Haack, Gary Kauffman, Robin Suggs, Sarah Workman

1. How are NTFPs inventoried in your area?

- ❑ USFS has had a standing protocol to inventory forest stands (Forest Inventory and Analysis (FIA), FHA) at 5 to 10 year intervals for vegetation management, or forest health, in anticipation for timber harvest. This type of inventory has been watershed based, focused on tree volume estimation, and silviculture prescriptions for merchantable timber. The trend is toward more holistic approaches that consider a larger diversity of forest habitat components, e.g. wildlife and understory plants. The Cherokee National Forest has, within the last two years, implemented yearly inventory for areas permitted for collection of their two major NTFPs, ramps and ginseng.
- ❑ In North Carolina, State agency (Gina Luka, Forestry??) staff are working across 23 counties on a one-time inventory of vegetation that provides cover estimates for forest species. USFS personnel developed collaboration with professionals in other resource management groups, Heritage Program and The Nature Conservancy, to characterize the plant communities across the state. Their common interest in native vegetation, sustainable land use and cultural heritage issues led them to design plans for a set of permanent vegetation sampling plots. They have 2500 plots, placed in selected locations across the Southern Appalachians, to estimate species diversity on tenth hectare rectangular plots.

2. How are NTFPs monitored in your area?

- ❑ Historic records document some large harvests of special forest products, but current permitting systems do not account for quantities actually taken off the forest. An example was mentioned of a large quantity of ginseng from Randolph County harvested around the time of the Civil War that was likely to have been 10,000 roots. Permits written for harvesters on National Forest lands at present allow for collection of a specified quantity of a certain product, though there is no verification of the quantity, or possible variety, of materials collected under the permit. In the Cherokee National Forest of Tennessee, the yearly inventory of permitted collection sites allows some monitoring of ramp and ginseng harvest. In the National Forests of North Carolina, including the Smokey Mountain National Park, a program to tag ginseng roots with a bio-fluorescent dye allows resource managers and dealers to recognize harvest sites and comply with CITES regulation. Dealers or buyers are aware of regulations for certified root and help maintain safeguards inherent to regulations such as the Five Year Rule for minimum age of export material.

3. Discuss any experiences you have had with inventory and monitoring that may be relevant to NTFPs.

- ❑ Much of the discussion took place earlier in the group session and some additional examples came out as the session period came to a close. The Cherokee National Forest has had high school classes involved in yearlong projects for water quality monitoring that could possibly be replicated for NTFPs. North Carolina National Forests have benefited from participation of Garden Club volunteers. The successful program has been set up to utilize 20-40 people for 1 week a year to help characterize plant communities according to the design set up by FS staff and collaborators.
- ❑ A question about sharing information between agencies or various institutions involved in vegetation inventory and monitoring generated discussion of data collection and compatibility. Participants have found it difficult to aggregate data or use data collected by others – whether intra-institution or even within the same forest. Permitting methods can differ between districts on the same forest, often different variables are measured by various groups with no coordination to standardize parameters, and groups with divergent perspectives (enviro- vs. timber beast mentalities) emphasize different data focus. [need clarification on discussion of BIA and tribal forestry, Qualla boundary and log moss issues]
- ❑ NF personnel with sales responsibilities encounter one aspect of product off-take while the botanist or ecologist on the forest/region sees information or is responsible for other aspects. One way the forest personnel can see data relevant to NTFPs is through law enforcement reports, for example those that document permit violations or contract supervision of timber sales – though it is most often after the fact.

Case Study Presentations

Gary Kauffman: “Monitoring the Medicinal Herbs Black and Yellow Cohosh (*Actaea racemosa* and *Actaea podocarpa*) in southern Appalachia.” USDA Forest Service, Asheville, NC.

Abstract

This presentation outlined the monitoring work of the Medicinal Plant Working Group in North Carolina. Habitat, conservation status, human pressures were presented. The monitoring protocols and the participants in the study were introduced, and the benefits and challenges of working with volunteers discussed.

For more information, please contact:

Gary Kauffman, Forest Botanical Products Specialist
National Forests in North Carolina
PO Box 2750, Asheville, NC 28802
(828) 257-4861
gkauffman@fs.fed.us

Marianne Burke: “Participatory approach to Sweetgrass restoration in South Carolina.” USDA Forest Service, Southern Research Station, Charleston, SC.

Abstract

Scholars have recognized the importance of stakeholder involvement in restoration efforts and sustainable use of natural resources. In South Carolina, sweetgrass (*Muhlenbergia filipes*) is a nontimber forest resource with ecological and socio-cultural importance. It is used for making baskets, a traditional African art form that was passed down by enslaved Africans to their descendants, the Gullah/Geechee people in the Charleston, South Carolina area. Previously abundant in the rural coastal area, urbanization has forced basket makers to travel to other states to collect the material, or purchase it from collectors. A lack of sustainability in the area where it is valued prompted the involvement of key stakeholders and local citizens in its proliferation and management. Through a survey of stakeholders, possible avenues for effective stakeholder management were identified and means of improving the sustainability of this resource were identified. Respondents identified a need for land dedicated to the production of sweetgrass for local use.

For more information, please contact:

Marianne Burke, Research Ecologist, USDA Forest Service Southern Research Station
Center for Forested Wetlands Research
2730 Savannah Highway, Charleston, SC 29414
(843) 766-0371, x.118
mburke@fs.fed.us

Or see: Halfacre, Angela C., Marianne K. Burke, Zachary Hart. 2003. Sweetgrass restoration in South Carolina: I. Community participation in sustainable use of a limited natural resource. Department of Political Science, College of Charleston and USDA Forest Service, Southern Research Station, Charleston, SC. Poster presentation.

DIRECTIONS: Afternoon Small Group Work: Participatory Inventory and Monitoring

Resource Managers Group:

Directions: Our goal with the following exercise is to get you to think about inventory and monitoring design questions and to think about how harvesters could be involved. Your ideas, insights, and concerns generated from this exercise will shape our recommendations on harvester participation in inventory and monitoring NTFPs. Designate a recorder to write responses on flipcharts, and a presenter, to share results with whole group. Write your responses on flip charts to briefly share when we reconvene in large group. Once you have finished, hang flipcharts on wall.

1. Would you be supportive of having harvesters involved in Inventory and/or Monitoring? Why or why not?
2. How could you engage harvesters in I and/or M? (How could harvesters help you?)
3. What would an ideal participatory I and M program look like? (What are the components, the process?)
4. What barriers do you foresee with involving harvesters in Inventory and/or Monitoring?
5. Brainstorm on how to overcome these barriers.

RESULTS: Industry Perspective: Edward Fletcher, Tony Hayes, Rebecca McLain**1. Would you be interested in participating in inventorying and monitoring? Why or why not?**

- Very interested in participating in inventory and monitoring programs for several reasons:
 - a) regulations are going to be passed whether we are part of the discussion or not, and I & M programs will produce data that can be used to develop sensible regulations based on what is actually happening rather than regulations based on what people think is going on. This is an important point to understand: if decisions are based on actual data, less rebuttal will arise;
 - b) it is important for industry to be proactive and remain ahead of the curve – I & M data can help us figure out what future trends will be and therefore where we should be investing our resources;
 - c) I & M participation provides industry people access to information that they might not otherwise have, and thus it can be an important learning process as well as providing tangible rewards in the form of better information about supplies, how to cultivate products, etc. In addition, industry folks have a lot to contribute to I & M, and can improve those programs enormously.
- At the “digger” level, it is less clear whether people will be interested in participating in I & M, primarily because people are reluctant to give away their knowledge about where patches are located. On the other hand, harvesters are the ones who know what is on the ground, and if they could be assured of exclusive access to an area, that might be an incentive for them to get involved in I & M efforts. (Issue of tenure, access, etc.)

2. How could you be involved in I and/or M? What could you offer to the effort?

- Group participants are already involved in I & M programs – one has been a key leader in the work that Gary Kaufmann has been doing on ginseng, bloodroot, black cohosh and goldenseal with Garden Club Volunteers. As such, he has provided important input into the data collection design and is also active in the data analysis and figuring out what the results may mean. In addition, one of the group participants was an initial facilitator of the Medicinal Plants Working Group sponsored by US Fish and Wildlife Service, which has taken on a pro-active role in inventory and monitoring of medicinal plants.
- Both industry participants noted that the Medicinal Plants Working Group (MPWG) has provided a place where different stakeholders can make new connections; learn about other industry perspectives, as well as the perspectives of academics and government staff members. It has also been an important venue where industry people have been able to understand the importance of developing workable regulations that will be beneficial for the industry. In this sense, the MPWG provides important two-way flow of communication amongst the various stakeholders.
- From the standpoint of what industry gets out of participating in groups like the MPWG, perhaps the most important thing to remember is that in order to survive, industry folks need to look at the trends in terms of supply and demand for products; they need to be able to figure out what will be available where and when, and whether there is a supply of labor to bring products from the woods to the market. They also need to understand prices, and links between prices and supply/demand for products. Many are looking ahead to cultivation so that they will be assured of a stable supply in the future. Some things that industry people can benefit from knowing include:

- ❑ Where are habitat losses occurring, and what is causing those?
- ❑ How can we “rescue” the NTFPs where habitat losses are occurring? Can a governmental ruling require notification of future habitat destruction (i.e., road construction) and allow organized rescues to occur?
- ❑ How do you increase conservation of what is there without losing all of your supply?
- ❑ What amount of a product comes from cultivated sources vs. wild?
- ❑ What is the distribution of various products?
- ❑ What are the market trends?

3. What would an ideal I & M program look like? (What are the components, the process by which it works?)

- ❑ One example of a good I & M program already exists – the American Herbal Products Association (AHPA) has a survey that its Raw Materials Committee distributes yearly to brokers and producers to obtain information about the amounts of wild and cultivated product that are sold for roughly 15 species. This is called the Tonnage Survey. AHPA has the data analyzed and provides it to U.S. Fish and Wildlife Service. An estimate of product value is also provided. The survey is an industry-produced survey, and is completely voluntary. Land managers could perhaps approach the AHPA to add additional species to the list.
- ❑ Note – key components thus are a) industry playing a major, if not the major, role in design and implementation of data gathering b) voluntary participation, c) – see below – protection of confidentiality via third party analysis of data

4. What barriers would you face in participating in an Inventory and/or Monitoring program?

- ❑ Key barriers noted:
 - a) issues of confidentiality of information
 - b) need for incentives for voluntary compliance/participation

5. Brainstorm on how to overcome these barriers.

- a) The participants noted that in the case of the AHPA survey, confidentiality concerns posed a major impediment. The members of the association addressed this issue by having a third party do the data compilation so that all members would have access to the final results, but not to any buyer-broker specific data.
 - b) If the I & M program provides information of value to industry, that in itself is a strong incentive to participate. For example, one of the participants noted that the AHPA survey allows him to have a sense of what his market share of certain products is, information that he would not otherwise have but that is useful in terms of his business planning.
 - c) At the level of field inventory/monitoring, participants suggested that providing exclusive access to products in certain areas might be an incentive for harvesters or buyers to share information about the amounts and types of products gathered on that tract of land.
- ❑ In a more detailed discussion, participants noted that the voucher system for ginseng yields quite a bit of data about amounts/values/sources of ginseng harvested in the south, Midwest, and east and that perhaps that model could be applied to other species.

- ❑ Participants also suggested that land managers could experiment with pilot stewardship programs (i.e. noted in c) above), where those who obtained permits would have exclusive access to the products on the tract covered by the permit. One participant suggested that NTFP managers could use a hunting permit model, where licenses are issued at a very nominal fee primarily as a means to keep track of who is out there. The low fee would make it more likely people would get permits. Special areas could be designated for places that are highly valued by gatherers, much as there are special designated hunting areas for specific wildlife species. Check stations could be set up similar to hunting check stations, where the amounts and species gathered could be tallied. The check stations would also issue harvesters with permits to sell their products – it would be at this level that harvesters would be assessed an amount that reflects the actual value of the product harvested. Land managers might need to limit the number of permits they issued, so as to ensure that an adequate number of check points could be staffed.

Non-governmental Perspective: Sharon Clarke, Dennis Desmond, Carol Haak, Robin Suggs

Caveat: These answers represent key discussion points by the group, but not necessarily consensus.

1. Would you be supportive of having harvesters involved in I and/or M? Why or Why Not?

Why

- ❑ Group supportive because:
 - Harvesters are major stakeholders in forest management
 - Harvesters often have valuable information about forests/sociocultural environment
 - Harvesters often have knowledge, sometimes handed down through generations, and can offer insights on NTFP species, forest health, problems, and more.
- ❑ Harvesters involvement could help overcome limited resources and/or political will by others to do I & M
- ❑ Could be coupled with economic development for harvester communities
- ❑ Reaching out and involving harvesters would be validation and recognition of their knowledge, a method that could help bring alienated harvesters that poach into a constructive partnership with science and management
- ❑ Could foster greater "ownership" in the well-being of the resource and forest sustainability
- ❑ Involving harvesters in I & M could help create a "community watch" mentality in which they work together with management to protect forests against problems like poaching.

Why Not

- ❑ Accountability will be a major hurdle. Other stakeholders will be concerned that harvesters will have a conflict of interest (i.e., case of the fox guarding the henhouse)
- ❑ Some environmental organization may oppose any program that gives opportunities or incentives for the extraction of forest resources
- ❑ Motives (other than "love for plants") may drive some harvesters (e.g., may see harvesting as just a job, or way to make quick cash)
- ❑ It will be challenging to forge common goals and cooperation out of harvester competition/independent mindset
- ❑ Undocumented workers/harvesters probably wouldn't/couldn't participate and could complicate a harvester I & M program in unforeseen ways.

2. How could you/your NGO support (offer to the effort) harvesters involvement in I and/or M?

- ❑ Create an education/certification development program that:

- promotes sustainable harvesting methods based on a best effort protocol/best management practices protocol
- Is coupled with market development for certified products
- Pays people to do the right thing (i.e., not intentionally harm the resource)
- Help create links to private landowners and educate newer landowners about the harvester I & M possibilities and/or programs.
- Can help straddle the gaps in funding and technical assistance to programs started. For example, they could show links between harvester involvement in I & M and healthy communities in proposals.
- Can help organize and recruit harvesters.
- Can network and sell idea to organizations such as environmental groups, government, etc.

3-4. Overcoming barriers/components of a program

- Getting harvesters to work together/organizing them for mutual benefit would present a unified voice/organization that may be easier for management/science to work with.
- Certifying harvesters (as opposed to the land) through training programs could increase their accountability/acceptance to forest management and science
- Offering incentives to harvesters (e.g., access, money, education) to participate in an I & M program broadly accepted by stakeholders can lead to their cooperation and reduce the need for regulation.
- A successful program should be a mutually beneficial exchange of meaningful information between harvesters and forest management.

Researchers Group: Brian Becker, Marianne Burke, and Jenny Cruse-Sanders

1. Would you be supportive of having harvesters involved in Inventorying and/or Monitoring? Why or why not?

- Yes, as partners. Harvesters have very valuable knowledge and they directly affect the plant populations of interest, therefore they should participate in and be informed of jointly-developed BHP (Best Harvesting Practices), bringing them into the big picture.

2. How could you support harvesters involvement in Inventorying and/or Monitoring? What could you offer to the effort?

- Harvesters may be good research assistants, utilizing their knowledge; they can assist in the development of GIS spatial databases. Integrated knowledge and technology transfers via harvesters should be a component of any University/Land Manager/NGO network. Researchers can train individuals and groups on inventorying and monitoring techniques.

3. What would an ideal participatory Inventorying and Monitoring program look like? (What are the components, the processes?)

The dream program would:

- Be inclusive, not excluding any particular group for political reasons;
- Possess uniform protocols, for comparison of data;
- Have continuity, not reinventing the wheel each time there is turnover at one of the partner institutions because knowledge has left the system;
- Have an interdisciplinary approach, including harvesters would help accomplish this;
- Be built on trust;

- ❑ Have an individual or institution serving as a coordinator;
- ❑ Extensive documentation and publications, not restricted to academic journals but also in media that is accessible to harvesters;
- ❑ Include acknowledgement of the harvesters and their roles!

4. What barriers do you foresee with involving harvesters in Inventory and Monitoring?

- ❑ Funding – collaboration
- ❑ Turn over and continuity – find replacement; organize reports and publish
- ❑ Lack of trust – time, communication, do what you say, listen...

5. Brainstorm on how to overcome these barriers.

- ❑ Funding limitations can be overcome by collaboration i.e., utilizing volunteers and harvesters;
- ❑ Continuity can be overcome by finding replacements when leaving a project, and releasing frequent reports and publications in media and language that is accessible to harvesters;
- ❑ Overcoming lack of trust requires time, communication, doing what one says they will do, listening...

Resource Manager Perspective: Kathy Andregg, Rick Hatten, Gary Kauffman, Mike Nicolo, Mark Pistrang, Sarah Workman

1. Would you be supportive of having harvesters involved in inventory and/or monitoring of NTFPs? Why or why not?

- ❑ Starts to build trust and counter mistrust that exists
- ❑ Seems like a good idea, but how? Local and long term harvester likely best bet, but tend to be independently minded and may not cooperate; like to maintain anonymity (legacy of fur traders)
- ❑ Will they work as a group; where are the guidelines?
- ❑ It would tax personnel that already have too much to do to train harvesters
- ❑ How to get reliable information (not exaggerated, accurate, not misleading, complete)
- ❑ Information perhaps of limited value if harvesters do not want to share their 'guarded' thoughts
- ❑ Would need to be mutually beneficial to both land manager and harvester; Harvesters may expect Feds to give something back for information provided
- ❑ Harvesters have spent a lot of time beating the bushes out collecting and observe many things

2. How could you support harvester involvement in inventory and/or monitoring? (What could you offer to the effort?)

- ❑ Personal interviews could be used to get habitat or trend information
- ❑ Harvesters could be involved in seed collection (e.g. ginseng) or some part of the process they see directly related to sustaining the resource they collect (e.g. perpetuation of the species)
- ❑ Trust builds up over time and could take years; optimal would be to get harvesters to 'buy into' forest management and feel some ownership

- ❑ Is there a way to get 106 Congress Section 339 'Fair Market Value' funds [Forest Botanicals Law] really back to District? Need policy feedback to support staff and involve harvesters
- ❑ Provide them with information/education about species management; get results of research back to them in a form they can use (e.g. pinestraw research results influenced how collection and management are currently done)
- ❑ Find a way to encourage voluntary 'measurement' of their harvest (through buyer?)

3. What would an ideal participatory inventory and monitoring program look like? (What are the components, the process?)

- ❑ Obtain information collectors are willing to give
- ❑ See what research gaps exist, what reasonable method could be used easily by harvester to estimate factor (number of seeds), and train harvester to collect data
- ❑ Would need to be include information useful to managers, harvesters, and other users
- ❑ Should be educational; connect I & M to issues that appeal to harvesters; solicit volunteers from interest groups with focus on particular habitat (e.g. bottomland forest, wildlife)
- ❑ Collectors need to see some benefit for their I & M efforts, e.g. what result do the permit buyers see for use of their permit fee (pay in, but does pay in affect management of resource they are interested in?)

4. What barriers do you foresee with involving harvesters in inventory and/or monitoring?

- ❑ Mostly discussed in # 1-3

5. Brainstorm on how to overcome these barriers.

- ❑ Find way to document supply chain of product to buyer
- ❑ How to get manager and buyer hooked up for information exchange
- ❑ Use K-V funds for I & M. Funds would allow for data collection that could improve future habitat conditions
- ❑ Involve collectors in information flow; learn from them and provide feedback; feedback through buyers to provide information relevant to harvesters
- ❑ Use dealers and buyers as conduits for information
- ❑ Stimulate commercial production of products
- ❑ Explore stewardship contracts for good practice harvesters/buyers (like Best Management Practices for riparian areas)
- ❑ Permit each individual and include some stipulation for verification of quantity collected or tie permit to some requisite to provide information (compliance)
- ❑ Tie permits to some mandatory training
- ❑ Find partnership (interest) groups to help with training/education, monitoring activities, organization of data collection

Final Discussion

What is the best way to reach harvesters?

- ❑ Through churches (i.e. Latino communities, such as galax harvester)
- ❑ What kind of benefits or incentives can we provide?
- ❑ Have harvester-only meetings, in which they participate in setting the agenda, logistics, etc.
- ❑ (In PNW, have had some success in meeting with harvesters in “mushroom camps” in the evening after folks get in from picking).
- ❑ Make announcements in publications (i.e. HerbalGram, Hunting/Fishing magazine)
- ❑ One-on-one interviews better venue for reaching harvesters than meetings.
- ❑ Imperative to be absolutely clear and honest with harvesters about why you are approaching them (length of study, scope of study, potential results, benefits, materials that will result out of it)
- ❑ How do we create and guarantee concrete payback to harvesters and the community in general.
- ❑ Must be willing to invest yourself- meet with harvesters on their terms at a time, place that is convenient to them.

How can we reach the younger generation?

- ❑ Noticed that the younger generation not continuing on the tradition of harvesting. Some efforts to reach younger generation through school programs (i.e. Pennsylvania’s timber industry model), 4H clubs, Boy/Girl Scouts.

State Folklore Programs

- ❑ An underutilized resource that could be a valuable for this type of effort.

Working with Private Landowners

One strategy would be to focus on working with private landowners to develop economic opportunities.

- ❑ Private landowners who want to learn what products are on their land could host a "fieldtrip", in which local harvesters are invited to "cruise" their land to inventory what NTFP species they might have. Thus, harvesters could identify what valuable NTFPs are located on the land. Then some sort of arrangement could be made for access, with a fee/percentage going to the landowner.
- ❑ Building on this idea is the possibility of developing harvester/buyer cooperatives, which work with private landowners, to get product off the private land. There is a model for this up in the Pacific Northwest (called the NW Research and Harvesters Association), and it has been quite successful. Certain harvesting "best-practices" were identified, harvesters were trained to be sure they followed these guidelines, and then harvesters get exclusive access to these private lands in exchange. This could be an excellent model to explore in the SE where private lands predominant.

EVALUATION FORM

Harvester Involvement in Inventorying and Monitoring of Nontimber Forest Products

Thursday February 27th, 2003 8:30am—5:00pm

USDA Forest Service, Southern Region Headquarters, Atlanta, GA

1. What did you like, or find useful, in today's workshop?

Multi-Stakeholder Approach

- The bringing together of people from different aspects of the industry – buyers, land managers, NGOs to discuss the issues.
- Meeting other folks interested in NTFPs; especially learning perspectives from different agencies and different “parts” of the process.
- Interaction between people in different disciplines, e.g. industry and land managers.
- Information from small groups – especially tangent information. Each contributed a different piece of the puzzle.
- Being together with people involved in all aspects of the non timber forest products program. Learned different perspectives.
- The gathering of like-minded individuals, from different branches and viewpoints.
- Learning views of different groups.
- Interesting people!

Workshop Atmosphere

- Openness of participants, inclusive, respectful atmosphere
- Learned several NTFPs. I started with a base knowledge of NTFPs that was very limited.
- On-site food and eating together helped to become acquainted.
- Sense of cooperation, community.

Networking

- Enjoyed networking. It was interesting that some of the problems I've seen seem to go with the territory and that it may just take effort to overcome the problems.
- Interacting with other people interested and working with NTFPs.
- Meeting people.
- Aspect of networking with folks that have worked on solutions to a sustainable FP programs.

IFCAE response: We agree that the opportunity to help network the various stakeholders involved in NTFPs is one of the most critical components of this workshop. We have repeatedly heard from all sides that improved communication is needed, and we are happy to hear that the workshop provided some good networking opportunities.

2. What needs improvement?

Greater Participation:

- ❑ I realize the weather affected attendance – but need a broader cross-section of participation.
- ❑ Where were the harvesters? Or at least their voices, since we spent a lot of time talking about them.
- ❑ How can we best contact harvesters?
- ❑ Harvester participation.
- ❑ Getting harvester input – perhaps asking some of the same questions (anonymous) to individual harvesters (in advance) and sharing their comments in the workshop.
- ❑ Would have liked to have more people present – especially some harvesters.
- ❑ I had hoped more USDA-FS and FWS personnel would attend to hear the information shared.

Case Study Presentations:

- ❑ Presentations were “rushed”. Perhaps should have been a 2-day workshop so we could have more time to fully develop issues.
- ❑ Presentations were too brief – a little rushed.
- ❑ Would like to hear each element of the NTFP program (resource managers, collectors, buyers, etc.) give a presentation related to their role so a holistic picture could be visualized.
- ❑ I originally thought we should have more “case studies”, but the work groups were very helpful. Short of having a larger meeting (not suggested), I think the schedule was great.
- ❑ Had no expectations but more time devoted to successful programs.

Workshop Location/Logistics:

- ❑ Workshop needs to be closer to collection areas.
- ❑ Location [Atlanta traffic!]
- ❑ Workshop itself ran well, pre-information needs improvement.
- ❑ Should have involved multiple disciplines in breakout groups for harvester involvement in monitoring and inventory.

Content:

- ❑ In addition to asking just how do we involve harvesters, need to ask how to overcome [general] barriers to inventory and monitoring.
- ❑ There probably needs to be an introductory course on NTFPs.

IFCAE response: We agree- we would have liked to have had greater participation of all stakeholder groups, particularly harvesters. However, our primary goal for the workshop was not to reach harvesters but the other key stakeholders and get them to consider how they could contribute (from their particular position, be it Forest Service, State forestry, NGOs or industry) to the effort of developing participatory inventory and monitoring programs. Formal meetings are not the best venue to reach harvesters, and our

research design was developed in response to this, in that we spent the first several months in the field talking with harvesters prior to the workshop in order to document their perspectives on these issues. However, it is clear from your comments that we can improve on how we share these preliminary findings, so we are now reworking the powerpoint presentation, so that you “hear” more of the harvesters voices. We are exploring the possibility of putting together a “soundtrack” that will accompany the slides to present the perspectives of the harvesters we have interviewed. In addition, we are compiling results from the interviews to put together a summary of the harvesters comments to be presented in the afternoon plenary in future workshops. In addition, we are expanding our case studies to provide more information.

3. Were your expectations for the workshop met? If not, why not, and how could we do better?

- Yes.
- Yes.
- Yes, but more higher ups from FS need to be involved – how to do this????
- Pretty much – lots of no-shows hurt overall participation process.
- Seemed like we didn’t have enough time – [but] some left early!
- Main expectation was to network with folks involved with NTFP. This workshop provided an avenue to do this and develop contacts.
- Harvesters weren’t actually represented – although information from interviews was presented the conclusions are biased towards people managing resources.
- I probably should not have been here due to my limited knowledge.
- My expectations were not specific so – okay.
- I came thinking it would be slightly different but realize it was a good mix of professions and backgrounds.
- Primary objective was to provide input, which was met.
- None expected.

4. Other Comments? Criticisms? Opinions? Insights? (Feel free to use more paper)

Process

- Need to have more of these workshops.
- Need more regional meetings.
- What is only beginning to emerge is the specific vantage point that each party has of the resource – understanding the needs of each group is important for developing standards.
- How do we get the information back to the harvesters?

Content

- Would have liked to have heard more about existing inventory and monitoring protocols for NTFP.

- ❑ It's important to develop specific monitoring recommendations – protocols for inventory and monitoring programs.
- ❑ What are possible funding sources?
- ❑ I would like to know more about opportunities for private landowners.
- ❑ What are the success stories – for private land? For public lands?
- ❑ A lot of focus on national forests.
- ❑ So many NTFPs with varying characteristics/issues -- focus on just a few?
- ❑ This helped me to see that our observations in western North Carolina regarding harvesting activities is mirrored across the country.

Logistics

- ❑ Too far to travel for some, expense of drive and spending night.

Facilitation

- ❑ Objectives were well set, data points well laid out, timing of agenda adhered to.
- ❑ Good job Katie, Eric, etc.!
- ❑

IFCAE team response: Thank you to everyone who took time out to attend the workshop, and who took time to provide this feedback. We are using it to improve the upcoming regional workshops in Pittsburgh and Portland. Although we were a small group, we did some quality work. Thanks again.

You are invited to a special one-day workshop

Harvester Involvement in Inventorying and Monitoring of NonTimber Forest Products

Date: Thursday, April 3rd, 2003

Time: 8:30 am to 5:00 pm

Location: Audubon Society of Western Pennsylvania
Beachwood Farms Nature Preserve
614 Dorseyville Rd, Pittsburgh, PA
(Directions: www.aswp.org click Beachwood Farms, then Directions.)

Geographical Focus: ME, NH, VT, NY, MA, RI, CT, PA, NJ, WV, OH, MI, WI, MN

Purpose of the Workshop: To bring together those people interested in the sustainable management of nontimber forest products—including federal, tribal, state, and private land managers, policy makers, scientists, buyers, and harvesters—to explore how harvesters might participate in a comprehensive biological monitoring program.

Context: This workshop is part of a national study funded by the National Commission on Science for Sustainable Forestry (NCSSF). www.ncssf.org

Registration: This workshop is free and open to the public. *However, pre-registration is requested. Please contact Katie Lynch no later than March 20, (503-320-1323, ktlynch@ifcae.org).

Organized by the Institute for Culture and Ecology

www.ifcae.org • 503-320-1323 • PO Box 6688 Portland OR 97228

PLEASE DISTRIBUTE WIDELY

EMAIL ANNOUNCEMENT

Please Circulate: A Special One-Day Free Workshop

Harvester Involvement In Inventorying And Monitoring Of Nontimber Forest Products (aka Special Forest Products) in the northeastern region, including ME, NH, VT, NY, MA, RI, CT, PA, NJ, WV, OH, MI, WI, MN

Date: Thursday, April 3, 2003

Time: 8:30 am to 5:00 pm

Location: Audubon Society of Western Pennsylvania

Beachwood Farms Nature Reserve, 614 Dorseyville Road, Pittsburgh, PA

(Directions available at: www.aswp.org click on Beachwood Farms, then Directions.)

Who Should Attend:

Anyone interested in the sustainable management of nontimber forest products, including federal, tribal, state, and private land managers, harvesters and buyers, extension agents, policy makers and scientists from the states listed above.

Purpose of the Workshop:

To explore how harvesters might participate in a biological monitoring program of nontimber forest product resources (such as ginseng and other medicinal plants, maple syrup, wild edibles, floral greens, galax, moss, etc.).

Registration:

This workshop is FREE and open to the public. ** However, pre-registration is requested. For more information and to pre-register, please contact Katie Lynch no later than March 20th, 2003 (503-320-1323, ktlynch@ifcae.org).

Format:

This participatory workshop is built around small group activities and interactive discussions. Lunch is provided, please let us know of any dietary restrictions.

Background:

This workshop is part of a national study funded by the National Commission on Science for Sustainable Forestry (NCSSF) www.ncssf.org The project's goal is to assess the relationships between forest management practices, nontimber forest products (NTPFs), and biodiversity in the U.S. For more information, visit our website: www.ifcae.org

Organized by the Institute for Culture and Ecology

www.ifcae.org 503-320-1323 PO Box 6688 Portland OR 97228

**Special One-Day Workshop:
Harvester Involvement in Inventory and Monitoring of Nontimber Forest Products**

Thursday April 3rd, 2003 8:30am – 4:30pm
Audubon Society of Western Pennsylvania, Beechwood Farms
Pittsburgh, PA

Workshop Objectives:

1. Illustrate the need for inventory and monitoring efforts of nontimber forest products (NTFPs);
2. Share our preliminary research findings for review and comment;
3. Discuss some of the concerns and possibilities surrounding the inclusion of harvesters in an inventory and monitoring program of NTFPs;
4. Develop strategies for including harvesters in inventory and monitoring;
5. Build networks with other stakeholders in the region with an interest in NTFPs.

Workshop Agenda:

8:30 – 9:00	Registration and Breakfast Mingling
9:00 – 9:30	Welcome and Group Introductions
9:30 – 9:35	Overview: Workshop Objectives and Agenda
9:35 – 10:30	Presentations: Overview, Definitions and Case Studies
<u>10:30 – 10:45</u>	<u>Morning Break</u>
10:45 – 11:05	Presentations: Preliminary Findings
11:05 – 11:45	Small Group Work: Current Inventory and Monitoring
11:45 – 12:30	Plenary Presentations and Group Discussion
<u>12:30 – 1:30</u>	<u>Lunch</u>
1:30 – 3:00	Small Group Work: Harvester Involvement in Inventory and Monitoring
<u>3:00 – 3:15</u>	<u>Afternoon Break</u>
3:15 – 4:15	Plenary Presentations and Discussion
4:15 – 4:30	Final Wrap-Up and Evaluations

Participant List

Harvester Involvement in Inventorying and Monitoring of Nontimber Forest Products

Thursday April 3rd, 2003

Audubon Society of Western Pennsylvania, Beechwood Farms, Pittsburgh, PA

Matthew Albrecht

Graduate Student, Ohio University
317 Porter Hall, Department of Environmental and
Plant Biology
Athens, Ohio 45701
740-593-1126, Fax: 740-593-1130
matthew.albrecht@ohio.edu

Janie French

PA State Coordinator, Canaan Valley Institute
650 Leonard St.
Clearfield, PA 16830
1-888-549-7640; Fax: 814-768-9587
janie.French@canaanvi.org

Eric Burkhardt

Research Assistant, School of Forest Resources
Penn State University, 7 Ferguson Bldg.
University Park, PA 16802
814-863-0401
epb6@psu.edu

Janet Janzen

Owner, Hawk Mountain Trading
P.O. Box 127
Smithville, WV 26178
304-477-3564
hawkmtn@ruralnet.org

Shana Byrd

Rural Action Forestry VISTA
P.O. Box 21, Glouster, OH 45732
740-767-2090
shana@ruralaction.org

George Kehm

Western PA Conservancy
1500 Valmont St. Pittsburgh, PA 15217
412-521-5506
george.kehm@verizon.net

Carolyn Davis

Natural Resource Specialist
Catocin Mountain Park
6602 Foxville Rd
Thurmont, MD
301-416-0536
Carolyn_Davis@nps.gov

Robert J. McBride

Planning Silviculturist, USDA Forest Service
200 Sycamore Street
Elkins, WV 26241
304-636-1800 x.292 Fax: 304-636-1875
rmcbride01@fs.fed.us

Ginger Deason

Coordinator, Appalachian Forest Resource Center
Rural Action
P.O. Box 157
Trimble, OH 45782
710-767-4938
ginger@appalachianforest.org

April Moore

Ecologist, U.S. Forest Service
222 Liberty St., Box 847
Warren, PA 16365
814-723-5150
amoore02@fs.fed.us

Teresa Dennis

Rural Action Forestry VISTA
P.O. Box 21
Glouster, OH 45732
740-767-2090
teresa@ruralaction.org

Sharon Nygaard-Scott

Forester, Renewable Resources
USDA Forest Service, Eastern Region
310 W. Wisconsin Avenue, Suite 580
Milwaukee, WI 53203
414-297-3349; Fax: 414-297-3127
snygaardscott@fs.fed.us

Colin Donohue

Director, Conservation-Based Development
Rural Action
P.O. Box 157
Trimble, OH 45782
740-767-4938
colind@ruralaction.org

Alan Pierce

Independent Consultant
1061 Mountainview
Duxbury, VT 05676
802-244-5875
arp@sover.net

Jeffrey S. Prowant

Forest District Manager
DCNR-Bureau of Forestry
423 East Central Avenue
South Williamsport, PA 17702
570-327-3450 Fax: 57-327-3444
jprowant@state.pa.us

Mark Remcheck

Community Forester, Penn State Extension
601 Court House Square
Washington, PA 15301
724-228-6940 Fax: 724-228-6939
mar15@psu.edu

Ronald Rohall

Consulting Forester
PO Box 27
Rector, PA 15677
724-238-4973
rjrohall@westol.com

Chris Rohrbach

Ecological Services, DCNR/BOF
PO Box 8552
Harrisburg, PA 17105
717-787-3444
crohrbach@state.pa.us

Rod Sallee

Forester, Forest Products Group
Forest & Rangelands Staff
USDA Forest Service
201 14th Street, SW
Washington D.C. 20024
202-205-1766; Fax 202-205-1045
rsallee@fs.fed.us

Laurie Schoonhoven

Information Specialist, Sustainable Forestry
Partnership
8 Ferguson Building, Penn State University
University Park, PA 16802
814-865-7932; Fax: 814-865-6275
lms28@psu.edu

Karen J. Sykes

Watershed Specialist/SAF Certified Forester
USDA Forest Service
180 Canfield St.
Morgantown, WV 26505
304-285-1532 Fax: 304-285-1508
ksykes@fs.fed.us

Sue Thompson

President, Pennsylvania Biodiversity Partnership
16 Terminal Way, Pittsburgh, PA 15219-1209
412-481-4400 Fax: 412-481-1019
thompson@pabiodiversity.org

Syl Yunker

Farmer, Boone-Sang, Inc., and
Appalachia Science in the Public Interest.
P.O. Box 717
Stanton, KY 40380
859-263-5508
cyunker@myexcel.com

Institute for Culture and Ecology Team:

Kathryn Lynch

Workshop Facilitator
Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-320-1323 (cell), 503-331-6681 (office)
ktlynch@ifcae.org

Eric Jones

Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-320-1323 (cell), 503-331-6681 (office)
etjones@ifcae.org

Rebecca McLain

Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-331-6681 (office)
mclain@ifcae.org

Regional Liaison:

Marla Emery

Research Geographer
USDA Forest Service, Northeastern Research
Station, Aiken Forestry Sciences Lab
705 Spear Street P.O. Box 968
Burlington, VT 05402-0968
802-951-6771 x1020 Fax 802-951-6368
memery@fs.fed.us

DIRECTIONS: Morning Small Group Work: Current Inventory and Monitoring EffortsActivity:

- ❑ Divide participants into groups of three to five, depending on number of participants/room.
 - ❑ Have each group designate a recorder, to write responses on flipcharts, and a presenter, to share results with whole group.
 - ❑ Task each group with discussing the following questions.
 - ❑ In the directions, stress that the following activity is relevant to all landownership types, from feds, to state, to private lands.
1. How are NTFPs inventoried and/or monitored in your region/forest?
 - a. Which species are included?
 - b. Methods used?
 - c. Who does the work?
 - d. Is it adequate? If not, why not?
 - e. Do they monitor the impacts from harvesting? From regulatory and non-regulatory activities?
 2. Discuss any experiences you have had with inventory and monitoring (of any resource) that may be relevant to NTFPs.

Small group facilitators note:

Your task is to keep the group focused, productive, and to create space for everyone to contribute. If your group starts getting off topic, gently bring the group back on task. It may be useful for you to read each question, then go around the group, then you can say things like, does anyone have any final comments for this question? Or if no one has any final comments for this question, let's move on to the next question. Then read that one out loud, to orient the group to keep them on task.

Question 2. The distinction here is PERSONAL EXPERIENCE, and the fact that they may have I & M experiences regarding other resources. So we want to explore these past experiences, see what we can learn from them that might be relevant for NTFPs. Have them go into detail: how was it set up, who did the work, what type of data, when, where, where users involved, etc. What worked? What didn't work?

Extra question, if your group gets done early: How do harvesters in your area contribute knowledge (or skills) about NTFPs that helps resource managers manage these resources? How could they?

RESULTS: Morning Small Group Work: Current Inventory and Monitoring Efforts

Group 1: Shana Byrd, Sharon Nygaard-Scott, Alan Pierce

1. How are NTFPs inventoried and monitored in your forest/district/state/region?

- ❑ Rural Action conducts a citizen monitoring program for species such as goldenseal, black cohosh and ginseng (Shana)
- ❑ Keeping Track, Jericho, Vermont. Keeping Track is a citizen-based monitoring program for charismatic mega-fauna such as moose, bear and bobcat. Planning commissions and local land trusts are approached to participate. If a town decides to enroll, citizens volunteer to become trackers. They go through a training on how to identify tracks, scat, and other animal signs (deer rubbing antler velvet, bear scratching trees, etc.). A number of transects are selected for critical habitat in the town and trackers run the transect 3 or 4 times per year, collect data (measurements and photos) and send data back to Keeping Track (Alan).
- ❑ New England Wildflower Society, Framingham, Massachusetts. NEWFS has a Plant Conservation Volunteer group (300+ strong throughout New England) and an Invasive Plant Atlas of New England Project. The Plant Conservation Volunteers locate and document rare, threatened and endangered populations that have not been visited by Natural Heritage Programs for many years, thereby helping understaffed State Heritage Programs with critical data collection and field truthing. PCVs are trained by NEWFS in how to fill out data sheets (counting ramets or genets, documenting co-occurring species, soil and weather conditions, suggested management activities to maintain plant populations, etc.). The Invasive project also trains volunteers to go out and document the presence or absence of invasives. Data from PCVs is collected by NEWFS and later goes into state heritage databases; data from the invasives project goes into NEWFS for a mapping project. Information from both projects is used to construct regional plant conservation plans (Alan).
- ❑ North American Maple Decline Project. This is a scientist-run monitoring project across the Northeast (forget which authority is in charge). Fixed plots are positioned in sugarbushes across the north and are visited yearly to observe tree health (presence/absence of pests, assessment of crown condition, etc.). While sugarmakers allow the decline study scientists access to their sugarbushes, data is unfortunately not exchanged between the scientists and the sugarers (Alan).
- ❑ Informal monitoring. As in all regions, harvesters conduct informal monitoring of their species, patches and sugarbushes. This is part and parcel of "wild tending" resources. Sugarmakers, for example, are very good at adjusting tapping practices or tree stand prescriptions based on tree health and overall stand health (Alan).
- ❑ Division of Wildlife. The division issues free permits for out of state sale of ginseng roots; they want to permit all diggers, but they don't (Shana).
- ❑ Permit system. In the Wayne National Forest, administrators count the number of permits issued each year (permits are issued by species – for example, for ginseng collection) and in subsequent years, harvesters are asked about the amount of herbs collected (Sharon). Shana contacted the Wayne National Forest to learn of record keeping of NTFPs (mainly ginseng, goldenseal, black cohosh, and blood root) and was told that they issued 196 permits in 2001 at \$10 each, with a map. This permits the collection of 1 lb. dry ginseng, 5 lbs. of other roots. Harvesters are

required to replant ripe berries in vicinity, can only harvest 3-prong or larger ginseng. No one to monitor harvesters (Shana).

- ❑ CITES regulations. In Vermont, the Vermont Dept. of Agriculture issues permits for ginseng collection (with spare "best harvest practices" instructions) and is responsible for recording the amount of root dug each year for the CITES reporting. At the Vermont Fur and Ginseng auction this past year, gatherers in the Vermont Ginseng Association agreed that no root sold at future auctions would have a "neck" of less than an inch in length (this is thought to indicate a root or 5 or more years in age) (Alan). Janet added that the sale of roots less than five years of age is a federal law, not a state one.
- ❑ Rural Action's Planting Resource Program (Shana).
- ❑ Ohio State University is thought to be looking into this topic, but group had no specific information

2. Discuss any experiences you have had with inventory and monitoring (of any resource) that may be relevant to NTFPs.

- ❑ New England Wildflower Society Plant Conservation Volunteer Program. Experience with the NEWFS PCV program shows that plant populations can be variable from year to year, and thus difficult to monitor. Herbivory, drought, movement (wind borne seeds such as mints tend to "move about a lot"), and "failure to appear" are but a few obstacles in finding plant populations consistently. Experience with NEWFS also shows that field records are often poorly kept ("plant in xyz township at 1,500 ft.", for example) and incomplete, making re-location of populations problematic. However, work with NEWFS also shows that volunteers can be very effective data collectors. They are very good amateur botanists (sometimes better than NGO botanists) that help fill critical data gaps in state records (Alan).

Group 2: Matthew Albrecht, Karen Sykes, Chris Rohrback, Eric Jones

1. How are NTFPs inventoried and/or monitored in your region/forest/area?

The group felt there was very little inventory and monitoring specific to NTFPs. A few examples from the region included:

- ❑ Jim McGraw's work with state agencies in 14 states to examine ginseng populations.
- ❑ Mention of an attempt in Ohio to try to find test plots put in 20 years ago [need details]
- ❑ In 2002, Matthew inventoried 6 medicinal plant species: black and blue cohosh, ginseng, goldenseal, bloodroot, VS snakeroot, wild yam. He did transect surveys on the Wayne National Forest in the summer of 2002. He targeted the six previously mentioned plants because these were the plants most consistently showing up in plant collection permits. The objective of the study was to provide some baseline data on the distribution and abundance of these organisms in the Wayne National Forest landscape. He found ginseng (and Virginia Snakeroot) to be broadly distributed but never abundant...very small populations. With the densities found, it does not appear that this plant can handle harvesting in the Wayne National Forest. He argued that private land (inholdings?) are the last refugium of American ginseng

on the Wayne National Forest.

- ❑ Some info is gained through permitting on amount of harvesters and what they are gathering. For example, each harvesting season the Wayne issues permits to harvesters for \$10. This allows a collector to legally harvest up to 2 lbs. of ginseng and 5 lbs. of any other species. I analyzed the permit data from the 1995-2001 harvesting and found a significant increase in the permits issued through time for bloodroot, black cohosh, blue cohosh, and Virginia snakeroot. Also, when the 2001 harvesting season was compared to the 1995 harvesting season, there was a 180% increase in the total number of permits issued by the Wayne. This suggests more people are out collecting medicinal plants. Ginseng and goldenseal are almost always listed in plant collection permits.
- ❑ Erin Larson, a researcher in southern Ohio has been looking at how prescribed burns impact medicinal plants. She received her master's from Ohio University in 2000. She is presently the botanist at the Wayne National Forest (ehlarson@fs.fed.us; 740-753-0558), and Matthew Albrecht has been collaborating with her on the plant collection permit analysis. They are also doing a study on how goldenseal regenerates following human harvest. Her thesis (she recently got married and her last name has changed): Hines, E.H. 2000. Indigenous landscape management by fire and moisture patch dynamics : an experimental approach in the Ohio Valley, USA. Masters Thesis, Ohio University. Matthew believes she created a database of ethnobotanicals in this region that is available on CD-ROM from the Ohio University library.

2. Discuss any experiences you have had with inventory and monitoring (of any resource) that may be relevant to NTFPs.

- ❑ We discussed the future plans in Pennsylvania to permit NTFPs to help identify location of where harvests occur – monitoring will be done by employees of forests.
- ❑ A list of key NTFPs that should be monitored on State Forest land needs to be developed.
- ❑ A land management issue is the lack of landowner objectives for NTFPs.

Group 3: Teresa Dennis, Bob McBride, Laurie Schoonhoven, Syl Yunker

1. How are NTFPs inventoried and monitored in your area? (describe which species are included, methods used, and who does the work. Is it adequate?)

- ❑ In Kentucky, Federal law requires:
 - record of sale for ginseng being exported (primarily to Hong Kong)
 - States to record sale out of state
 - ginseng must be 5 years or older
 - limit of 3%
- ❑ But only half recorded.
- ❑ Ginseng sustainability is dependent on harvester desire to retain
- ❑ Is it adequate? Growers monitor own lands, but it is not adequate. It is very secretive.

Group 4: Eric Burkhart, Carolyn Davis, George Kehm, April Moore, Rebecca McLain**1. How are NTFPs inventoried and monitored in your area?****(describe which species are included, methods used, and who does the work. Is it adequate?)**

The group included:

- A land steward with the Western Pennsylvania Conservancy (WPC)
 - Ecologist, Allegheny National Forest (ANF)
 - A graduate student at Pennsylvania State University (PSU) who works with ginseng growers
 - Natural Resource Specialist, Catocin Mountain Park
- **WPC:** The WPC has experts it brings on to monitor salamanders, mussels and some plants. Not sure of methods used, or who does the work. Not sure if it adequately addresses biodiversity concerns. Land stewards can go along with the experts who do the inventory and monitoring, but they don't always go along. There are 2 environmental centers with permanent staff who work with locals to identify locations of invasive plants and rare and endangered species. The Carnegie Museum has historical records of flora and fauna in the area, which are quite useful. WPC is involved in the Natural Heritage Inventory.
- **ANF/PSU:** The ANF, PA Bureau of Forestry (DCNR), and researchers at PSU are participants in a newly formed sub-committee on Inventory and Monitoring. The sub-committee is a cooperative venture between the state and various federal agencies. The sub-committee was formed in particular to address concerns about possible over-harvesting of ginseng and other medicinals. It could potentially be expanded to include fungi, lichens and moss. It was formed because those involved felt that to-date monitoring has been limited to information gathered through issuing permits and enforcing them, and a more pro-active approach was needed to adequately assess the sustainability of harvesting levels. Under the current system, counties, WPC, TNC, and DCNR are responsible for data collection, which then goes into the Pennsylvania Natural Diversity Inventory (PNDI) database.
<http://www.dcnr.state.pa.us/forestry/pndi/pndiweb/htm>.

The regulatory agencies can consult the database to see what the situation is for various species in areas where they intend to undertake actions that might affect vegetation. The I&M sub-committee seeks to develop a formal methodology and standardized protocols for application across the state on State forest lands.

- The I&M effort focuses on species where the possibilities for destructive harvesting are greatest. So for example, berries and mushrooms are low on the radar screen since such harvesting is less likely to have a negative effect on the organism. The group has very few resources so is focusing most on more threatened species. They have developed a list of top 5 and top 10; with ginseng, goldenseal, wild leek, lycopodium, and yellow lady's slipper among the top 5. The effort is focused in particular on understanding what the rates of removal are, and whether these are sustainable. Some issues associated with the effort include discrepancies in the amount of effort and support that the various counties provide, and thus variations in the breadth and depth of I&M efforts over the state.
- The PSU team is working on an on-going effort to do I&M with the Pennsylvania Natural Diversity Inventory (PNDI). The people involved are contractors who are paid with research funds. Their role is to locate and monitor sites.

- ❑ The Allegheny National Forest also does I&M for a number of species, though mostly focus on plants and not lichens or mushrooms. Lichens are inventoried with Forest Health monitoring plots (an offshoot of the FIA plots). The forest also has several Forest Inventory and Analysis/Forest Health Monitoring plots, which have recently been modified to include understory plants in the inventory/monitoring effort. They are beginning to take out the NTFP data from the broader data set. Main participants in the I&M are permanent FS personnel, seasonals, and contractors. The ANF's work is also connected to the state efforts under the Natural Heritage program. There are a lot of parts to it, and a lot of people involved.
- ❑ **Catoctin Mountain National Park:** The Park does a formalized vegetation inventory of designated experimental plots every year to track changes. The park is a big area for morel pickers, and people have complained that there are fewer and fewer morels over the past few years. Park staff have submitted a grant proposal to get funding to conduct a morel mushroom inventory; most likely would use local volunteers/harvesters as a way to get cooperation with the policies that would emerge from the project. In theory people are not allowed to gather plants off the park, though fungi for personal use can be harvested. However, there is a lot of poaching of ginseng and black cohosh. Deer depredation is the biggest difficulty the park staff have encountered in terms of their study plots.

2. Discuss any experiences you have had with inventory and monitoring (of any resource) that may be relevant to NTFPs. We didn't get to this beyond what is described above.

Group 5: Colin Donohue, Jeffrey Prowant, Ron Rohall, Rod Sallee

1. How are NTFPs inventoried and monitored in your area?

(describe which species are included, methods used, and who does the work. Is it adequate?)

- ❑ In Pennsylvania forests, ginseng is the only NTFP monitored, which is done via tracking permits. There are also permits given for stone and firewood. Anecdotal information exists.
- ❑ Within the US Forest Service, there is a computerized permit system. Product Plans identify how much plant material is available for harvest, and once permit levels have reached this number, no more permits are allowed. There is good data on fuelwood.
- ❑ In Ohio, Matthew is involved with an inventory project (see Group 2 discussion above).
- ❑ Shawnee National Forest Floristic survey. This is being done as complete surveys with specimens being archived. This gives all the detail of all herbaceous plants in the areas collected which will give information for the manager to use regarding any proposed or ongoing non-timber forest product harvesting. The Forest Botanist for the Shawnee NF is responsible for collection and filing the information.

2. Discuss any experiences you have had with inventory and monitoring (of any resource) that may be relevant to NTFPs.

- ❑ Within the timber inventories, researchers "ground truth" with specific plots. This could be done with nontimber forest products as well.

- ❑ Consulting foresters inventory timber. They could be trained to inventory NTFPs as well. In other words, when out cruising timber, could cruise NTFPs. One barrier to this is how to collate that proprietary data. Typically when inventory timber the information gathered is proprietary data between consultant and landowner and not for public domain.
- ❑ **Forest Stewardship Council certification** has brought up NTFP issues. Alan Pierce added that FSC approves NTFP certifications on a case-by-case basis. To date, several products have been certified, including some maple syrup, as well as chicle in Mexico, palm hearts in Brazil, oak bark in Denmark, venison (!) in the UK, 30 species of medicinal plants in a Brazilian plantation, etc. A report on FSC's current NTFP policy and activities is available on their website www.fscoax.org under the issues section. As far as monitoring, it is up to the certifiers to come up with monitoring indicators. The maple standards that I wrote for SmartWood are not heavy on monitoring - mostly pest and tree health monitoring, with the biggest issue being rapid tap hole closure (which my consultation with experts and sugarers seems to indicate as a sign of good tapping practices and good tree vigor - that is, if a standard tap hole closes over to an extent where a no. 2 pencil cannot be inserted into the wound by the end of the second year. This is a "quick and dirty" way to get a pulse on tree health while cruising a sugarbush - that is, if a lot of poor closure is observed, it might spark a discussion with the manager about what is going on here?). There were some other monitoring pieces as well. Ron Rohall offered the following link: www.scs-certified.com/PDFS/forest_statepenn.pdf see pg xvi, Recommendations 17, 18, 19.
- ❑ US Forest Service- plant survival counts, could include NTFPs
- ❑ Carnegie Museum of Natural History, BioForary. This project identifies quantifies and monitors populations of forest flora and fauna where harvesting of NTFPs is not permitted and may have some value by providing baseline data or acting as a control site for research. See website below: <http://www.carnegiemuseums.org/cmnh/news/02-mar-apr/041102bioforay.htm>
- ❑ Ginseng population monitoring in KY, OH
- ❑ **Is it Adequate?**
 - In PA State Forests- No. It is piecemeal. The Shawnee Survey is adequate, but needs monitoring.
 - No. As a consulting forester- do not have enough information to make good recommendations to landowners.
- ❑ Challenge to promoting this is that the public doesn't feel the need, and they are not paying attention to this issue.

Group 6: Ginger Deason, Marla Emery, Janie French, Janet Janzen, Sue Thompson,

1. How are NTFPs inventoried and/or monitored in your area?

WEST VIRGINIA

- ❑ Ginseng is formally monitored by the state of West Virginia. Buyers must have a (free) dealer's license from the Department of Forestry. To get a license buyers must present their business license and several other pieces of documentation, which include a letter of good standing from WV Worker's Compensation and WV Employment Security, plus if they've been a buyer in previous years, they must have filed their monthly and yearly ginseng reports on a timely basis. There is a digging season (August 15 through November 30). During the season, dealers send in a monthly report that includes a record for each purchase and sale that they make. Purchase

reports include name, address, social security number (if the digger will give it), county where the root was harvested, whether it was wild, cultivated, etc., and the amount (weight) purchased. Sale reports record the amount sold, to whom, and the purchasers' dealer's permit # for each sale. At the end of the season, the dealer sends in a report for the year. Jan thinks probably 75-80% of ginseng dug in the state is reported.

- ❑ Ginseng must be certified to leave West Virginia legally. An export form is also required.
- ❑ West Virginia has stringent rules for ginseng but permits are not required for digging.
- ❑ A few years ago West Virginia barred the export of roots less than 5 years old. Jan tells people to keep the age stem so they can prove how old it is. Sometimes this isn't feasible. If the age stem is not intact, then we judge by the size of the root. All of our diggers know they can't bring in a bag of match-stick size roots and expect to sell them- buyers won't buy them because they can't export them!
- ❑ If the dealer reports show that harvest levels are down for a year, the state personnel who track it assume that it is because population levels are down. But people who dig are in it for the money. If the mines are on strike, people dig more. If there are jobs and other sources of income, people don't dig as much.

PENNSYLVANIA

- ❑ The Department of Conservation and Natural Resources (DCNR) provides grant money for natural heritage inventories. The Western Pennsylvania Conservancy does most of them for western Pennsylvania. The Nature Conservancy does most of them for eastern Pennsylvania. The heritage surveys focus on "key" habitats. They list some species found in the habitats, but mostly species of concern. Mostly plants on the Pennsylvania state vulnerable list are monitored (goldenseal, lady slipper orchids). Field studies are done prior to development activities.
- ❑ DCNR is responsible for ginseng monitoring. They track sales, the number of roots per pound, age, etc. In the past a \$50 permit was required for harvesting. Now there is no permit requirement.

DIRECTIONS: Afternoon Small Group Work: Participatory Inventory and Monitoring**Non-governmental Organizations**

Directions: Our goal with the following exercise is to get you to think about inventory and monitoring design questions and to think about how harvesters might be involved. Based on your experiences and knowledge, discuss the questions below. Your ideas, insights, and concerns generated from this exercise will shape our recommendations on harvester participation in inventory and monitoring NTFPs.

- ❑ Designate a recorder to write responses on flipcharts
- ❑ Designate a presenter to share a concise summary of your discussion with the whole group.
- ❑ Make sure that everyone in your group has a chance to share their thoughts on each question.

-
1. Would you be supportive of having harvesters involved in I and/or M? Why or why not?
 2. How could you support harvesters involvement in I and/or M? (What could you offer to the effort?)
 3. What barriers do you foresee with involving harvesters in Inventory and/or Monitoring? Brainstorm on how to overcome these barriers.
 4. What would an ideal participatory I and M program look like? (What are the components, the process?)

RESULTS: Non-Governmental Organization Perspectives:

Shana Byrd, Ginger Deason, Teresa Dennis, Colin Donohue, Janie French, Katie Lynch, Sue Thompson, Laurie Schoonhoven

1. Would you be supportive of having harvesters involved in I and/or M? Why or why not?

Yes, we would be supportive, because:

- Harvesters are impacted the most—by resource sustainability and by any resulting policy, regulations or laws.
- Harvesters know the areas where the plants are found and the lay of the land
- Harvesters know the growth habits of the plants more than researchers
- Harvesters would be involved in the research and decision-making processes- thus empowering them, giving them a voice in the management of the resources they use and depend upon
- They should have a voice in policy decisions that affect their livelihoods. (Several people noted that this is a very important point!)
- It would help build credibility and trust with harvesters
- By being involved in inventory and monitoring each year, harvesters would have a direct understanding of how their harvest practices may be effecting or impacting plant populations.

However, some concerns and questions with involving harvesters:

- They can circumvent the process or discredit the science
- Could create conflicts between harvesters, if some are involved and others aren't.
- Will participating in an inventory and monitoring program contribute to or deter harvesters from poaching? An experience from The Roots of Appalachia Growers Association in Ohio illustrated the concern. Volunteers helped in a ginseng rescue (moving plants from a site that was going to be destroyed for development to another appropriate forested location), but shortly afterwards all rescued plants were poached. Unsure if it was volunteers, but strong suspicion.
- How do you decide who is a candidate for participating?
- How do you set up training/accreditation and raise funding/support for the process?
- Using harvesters might be too species specific if you desire an ecosystem approach, particularly if harvesters specialize in digging only one particular plant, or only do moss, etc. For example, harvester may only dig ginseng and yellowroot, and may not have in-depth knowledge of other forest species. Jan commented that this is very true, that many of her diggers harvest less than five different plants.
- Harvesters respond to market demand, so with volatile markets, might change what they are harvesting in the middle of an inventory and monitoring program, which by the nature of I & M

programs are long-term studies. How an I & M program will deal with this issue needs to be considered.

2. How could the NGO sector support harvesters involvement I and/or M? (What could you offer to the effort?)

- ❑ Develop training materials
 - For example, Pennsylvania Biodiversity Program develops training materials regarding biodiversity. They could do the same for NTFPs. The Education Task Force would take the lead, and would involve harvesters in their design and the development of the specific indicators (age, measurements, guidelines for each specific species). The training materials could be developed at a species or ecosystem level (multiple species).
- ❑ Train the trainer programs, in which nonprofits use the training materials to train harvesters, who then go out into their communities and continue the training process.
- ❑ Conduct research and provide good data (and a broader set of data) about harvesting to land managers.
- ❑ Collect economic data in order to make the case for NTFP local/rural economics
- ❑ Advocate for inventory and monitoring of NTFPs.
- ❑ Advocate for funding mechanisms (ie. tax described below), by proposing, writing and lobbying for supportive legislation.

3. What barriers do you foresee with involving harvesters in Inventory and/or Monitoring? Brainstorm on how to overcome these barriers.

Barriers/Concerns:

- ❑ Would harvesters be conducting inventory and monitoring activities while harvesting? If so, this might create problems, for what would be the incentive to take time from their economic activity to do this research?
- ❑ Incentives are needed. Could be direct, tangible incentives like money or access to land. Could be indirect incentives like ensuring the long-term viability of the resource.
- ❑ Would the inventory and monitoring activities need to take place the same time harvesters are out in the field?
- ❑ Need funding for developing I & M programs, and funding for research (social, economic, ecological)
- ❑ Who will analyze and use this data? Must consider the differences in land ownership patterns across the United States, as this will have a major impact on how an inventory and monitoring program will be developed and implemented.

- ❑ In the Northeast, have significant private landownership. So, how will data from I and M be used? By whom? As we design an inventory and monitoring program, we must get initial input from non-industrialized private forest owners.
- ❑ How do we engage with land managers in order to a) understand what data they need to better manage these resources? or b) help facilitate the process of defining what data is needed to better manage these resources?
- ❑ Ginseng is a high risk plant to begin a new pilot with - the stakes are too high.
- ❑ How do you get people to embrace an “And logic”? Meaning, how do we get people to look at economic, environmental AND social components. How do we get people to understand that we can promote both sound environmental management AND rural economies.
- ❑ Lack of data. How do you sustainably harvest NTFPs while promoting conservation-based income generation? And how do you promote income generation while promoting conservation? How do you create a market for sustainably harvested NTFPs? How much can you sustainably harvest?
- ❑ Issue of data validity. How do we ensure the competency of the persons involved in inventory and monitoring?
- ❑ Then how do we help others recognize their legitimacy? How do we help value local knowledge? (Again, part of the “and logic”: how do we get people to recognize the value of scientific knowledge AND local knowledge?) For example, might find that private landowners uncomfortable having harvesters conducting I & M on their lands. Would feel more comfortable or would accept a state or federal employee more readily, even if harvester has more on-the-ground knowledge.
- ❑ Political leaders do not recognize the importance or value of NTFPs.
- ❑ One of the challenges of studying how harvesting is impacting a species, is that we need time to measure impacts. Yet, market forces change. Opportunities open and close on a scale too fast to measure in long-term ecological studies. If scales are incompatible, how do we time it, with market forces? How do we know what the next big thing in the market is going to be, and that we should be collecting baseline data on it, before it becomes big deal in market?

Overcoming Barriers/Addressing Concerns:

- ❑ Regarding Funding: Could develop a tax, similar to that levied on corn, soybeans and other agricultural products, in which a percentage of the total weight is taxed and that money goes into research. Systems like this are already in place, so could be modeled for NTFPs. Growers have supported this because they know the money goes directly into research to help their industry. It is done at the state level, not at the permit level.
- ❑ Regarding Funding: look at example of cod fisheries. Maybe lessons there. (check out book *Cod: A biography of a fish that changed the world.*)
- ❑ Regarding incentives: money should be involved. But also recognize that access is a major incentive, especially in the east, where access to private lands is sometimes difficult to gain.

- ❑ Regarding Lack of Data: nonprofits can contribute through their own research, can advocate for more research, can go to Universities and talk with professors and students to encourage more students to do their research on NTFPs.
- ❑ Regarding which species: Some felt that a new I & M shouldn't start with ginseng, due to its high value and current CITES status. They suggested it would be more appropriate to start with black cohosh or other more common plant that people are not so concerned about, nor so secretive about and develop the pilot around them. Other participants felt that ginseng monitoring programs are already in effect and that it would be possible to tailor this system and use it as a prototype of I & M for other species.
- ❑ Regarding who to involve: Could contact buyers and ask for their assistance. Explain the idea to them, and then have them identify which harvesters they think would be best. Buyer then approaches those harvesters to see if they would be interested in participating.
- ❑ Nonprofits could help private landowners take a leadership role in inventory and monitoring of NTFPs on their land. In other words, rather than waiting for public land managers to do it, and following their lead as is often the case, flip it around. Have private landowners take the lead and provide a model for the public managers.
- ❑ Programs, outreach, conferences, and extension work could help educate private landowners of the potential to make extra income through the management of NTFPs. This provides the incentive.
- ❑ Develop local value-added opportunities, so that resource is not simply extracted and shipped elsewhere for development. If have value-added opportunities within the region, then creates more incentives and economic development in the area.
- ❑ Nonprofits need to identify what we (as nonprofits) want to promote. Look at research, look at our field experiences, and decide where to go, and then advocate for it in appropriate places. Be the driving force for change and innovation.
- ❑ Regarding political leaders: Nonprofits could conduct or support research into the economics of NTFPs, so that we can more successfully advocate for NTFPs. State and federal representatives are not going to do anything, unless we can make a strong economic case. (For example, Dear Mr. Legislator, X people from your district, the people who vote for you, make X\$ from harvesting NTFPs. This provides an important economic contribution. Harvesting is important for the livelihoods of X people in your area. So you must do something to support it.)
- ❑ Need to support the research, so that we can in good conscious promote the commercial harvest of some species and know that it is viable and that we are not harming the species.
- ❑ If we help develop NTFP industry, we are in effect creating a constituency that is gaining economic benefits from an activity. So this group then has more of a political voice. Legislators more likely to listen.

4. What would an ideal participatory I and M program look like? (What are the components, the process?)

The program would:

- ❑ Incorporate harvester interests, plus other stakeholder group interests
- ❑ Begin with a review of the literature, including gray literature
- ❑ Identify what are the key ecological questions that need to be answered. (ie. presence/absence, density, what is the impact of harvesting to the species and on other plants and wildlife? What is the impact of fragmentation on the species? How are other land management practices--logging, grazing, road-building, forest conversion to agricultural or housing, oil and gas development--impacting the species and harvesting practices?)
- ❑ Identify what are the questions we want monitoring to answer, based on who is going to use the data. For example, in PA, 70% of the land is private, with 20 acres or less. So how can monitoring drive sustainability given this type of fragmented land ownership?
- ❑ Start with a species with breathing room (e.g. black cohosh, galax)
- ❑ Determine if the species can be commercially harvested, and if value-added products can be developed. If we can persuade private landowners to manage for biodiversity rather than just timber, then developing markets becomes focus. Tool for promoting conservation. Double-edge sword though, so must be careful.

Private Consultant, Grower, Extension Perspectives:

George Kehm, Alan Pierce, Ronald Rohall, Karen Sykes, Syl Yunker, Eric Jones

1. Would you be supportive of having harvesters involved in I and/or M? Why or why not?

- ❑ The group agreed that harvesters could and should be involved in Inventorying and Monitoring but with some qualifications.
- ❑ A consequence of increasing visibility of harvesters to lawmakers, managers, IRS, and others could undermine the informal character of many NTFP activities, expose underground economies, and negatively impact users/cultural patterns with unknown consequences to the resource.
- ❑ In some areas ginseng harvesters have become or appear anti-social, a factor that could lead to increased misunderstandings and conflict between users competing for the same resource. Some forms of regulation might be necessary to help prevent conflict. As NTFP values increase this could lead to increased conflict between harvesters and landowners.
- ❑ By participating in formal inventorying and monitoring programs it might help send a message from harvesters to other stakeholders (e.g., conservation groups) that they are interested in protecting forests and understanding what harvest sustainability is.
- ❑ Involving harvesters in inventorying and monitoring can give them a feeling of having ownership in management and science processes that impact their lives.

2. How could you (as a private consultant, grower or extension agent) support harvesters involvement I and/or M? (What could you offer to the effort?)

- ❑ Might be able to provide incentives to harvesters such as access privileges to get them to participate in I & M. One strategy for doing this may be to help identify who is going on the land, requiring reporting to get access. Where parcels are small, a harvester might be able to get exclusive access and avoid competition from other harvesters. This wouldn't necessarily limit access by other user groups.
- ❑ Some growers and/or buyers might be able to provide formal training for harvesters for inventorying and monitoring.
- ❑ It might be strategic to do outreach (e.g., publications, meetings) to environmental groups on the importance of inventorying and monitoring and what role harvesters could play. Smaller groups are likely easier to target than larger groups, typically the most mistrustful. Targeting larger ones could backfire if it draws attention to what they perceive as problems. If larger groups are targeted then it is important to concentrate on specific individuals who would be sympathetic.
- ❑ Botanical societies can assist in the process of creating programs for harvester involvement.

3. What barriers do you foresee with involving harvesters in Inventory and/or Monitoring? Brainstorm on how to overcome these barriers.

- ❑ Program designs should recognize that species will have their own set of challenges and issues concerning harvester involvement. For example, matsutake and ginseng are such high value products that there is likely to be a high theft risk to designs such as those with test plots. Understanding local cultural patterns using social science and other tools can help in the design of culturally appropriate/locally accepted projects.
- ❑ Important to recognize that humans have long played a role in shaping local landscapes and that there are no pristine forests, nor do they exist in a steady state. You can't exclude humans based on an argument of pristine forests. NTFP harvesting has been one of the activities by which humans have used forests and understanding how that interaction has and continues to shape forest ecology is important for understanding how to manage them.
- ❑ A barrier to NTFPs is that forest management has sustained biodiversity at a high level, that is, the density and quantity of NTFPs may not exist in many forests under their current state. We need to point out that NTFP management is a better use of forests than many other uses.
- ❑ Fear of being taxed on money currently made under the table may be a barrier for harvesters to come forward and participate in I & M programs. Some basic business training (e.g., on how to organize themselves formally to get tax right offs) could help bring more harvesters about ground.
- ❑ Many harvesters will be concerned about exposing proprietary rights (e.g., patch location). Relationships could be forged with scientists, agencies, etc. whereby harvesters provide information/participate in I & M with restrictions on how data is used or made publicly available. For example, scientists could be made privy to patch locations but such information would be withheld from the public. An issue for growers in offering training where they show trainees

patches will be to guarantee that the trainees don't return to remove product without permission from the grower.

- ❑ Need to look for innovative examples of enticing harvesters to get involved in I & M. For example, one Cornell researcher offered baseball caps that said "Seng Digger" to harvesters who sent him soil samples from their patches without disclosing exact patch locations.
- ❑ Cash incentives might be a strategy for getting harvesters to participate.

4. What would an ideal participatory I and M program look like? (What are the components, the process? What are your recommendations on how to develop this?)

- ❑ Any program needs to consider the following at least:
 - Identify what products you want to I & M
 - Identify who needs the information
 - Identify potential organizers and partnerships
 - Identify who is legally responsible for protecting NTFPs
 - Develop a training program to collect good consistent data.
- ❑ Training programs could be state or NGO based or a combination of various groups. An example of a potential I & M program with training might be the New England Wildflower program. The Herpetological Atlas program might be another example for developing an I & M program. For certain NTFPs there are existing networks (e.g. Maple Syrup Associations) that could be tapped into as potential trainers and partners in harvester based I & M. Vocational schools, community colleges, and cooperative extension might be good places to base training programs. RC&D isn't big on doing training themselves, but might be useful for helping raise funds.
- ❑ I & M programs could potentially piggy back on existing programs.
- ❑ An example of why understanding I & M is very important to growers is that it can help them understand processes like how companion plants can help suppress diseases.

Researchers/Buyers/Harvesters Perspectives:

Matthew Albrecht , Eric Burkhart, Marla Emery, Janet Janzen, April Moore, Chris Rohrback

1. Would you be supportive of having harvesters involved in inventory and monitoring? Why or why not? (Researchers)

- ❑ Their on-the-ground knowledge of populations, locations could be integral. Their input is critical. But there are some aspects they probably shouldn't be involved in, that should be the primary responsibility of the researcher; things like statistical analyses that researchers hardly want to do. Harvesters can help with interpreting, making sense of data. They help make results practical.
- ❑ Harvester *and* buyer input are the only way to get a good study.
- ❑ Buyers can help make the connection to harvesters, who tend to be suspicious of anyone from outside. Buyers know which harvesters are most likely to be conscientious and would work out well. Trusted buyers can help establish trust between harvesters and researchers.

- ❑ Involving harvesters is a good idea because it would make managers pay attention to issues at the on-the-ground level.
- ❑ Harvesters can be helpful in monitoring the age structure of NTFP populations. They know the visual markers.
- ❑ Harvesters have a vested interest in NTFP population sustainability.
- ❑ Building trust is key to collaborative inventory and monitoring. Researchers should invest time and effort in building trust and mutual understanding. This could include building trust for an organization as well as individual researchers.
- ❑ Re. making sure there's something in it for harvesters and buyers, researchers have to commit to giving something back. They can make it clear that they will serve like consultants, sharing information, helping people get funds for things they want to do, etc.
- ❑ Researchers also need to convey respect for people's time and knowledge, use appropriate language, and forget the "school of intimidation."
- ❑ People who sit in an office often forget what NTFPs mean to harvesters.
- ❑ Researchers need to not assume that regulation should be an outcome but be honest about dealing with that issue.

Would you be interested in participating in inventory and monitoring? Why or why not? (Buyers/Harvesters)

- ❑ Some will, some won't. Having a local connection (for researcher) will make a difference.

4. What would an ideal participatory I and M program look like? (What are the components, the process? What are your recommendations on how to develop this?)

Looking at ginseng:

- ❑ Collaborative, bottom-up approach, with harvesters and buyers part of identifying research questions and approaches to them.
- ❑ Research design should be kept simple. Demands on harvesters and buyers must be reasonable.
- ❑ Consider recording simple measures like presence/absence, increase/decrease in species.
- ❑ Multiple species can be monitored. When harvesters go out they are usually looking for multiple things.
- ❑ Think about things like preserving anonymity for harvesters who are collaborating and their individual data.
- ❑ Data collection can/should be annual
- ❑ There should be an upfront understanding of roles and responsibilities.

- ❑ Re. buyers, harvesters, and data collection, consider verbal reporting as well as recording on data forms.
- ❑ Buyers and harvesters can help explain why things happened, why the data look the way they do.

Managers Perspectives: Carolyn Davis, Robert McBride, Sharon Nygaard-Scott, Jeff Prowant, Rod Sallee, Rebecca McLain

1. Would you be supportive of having harvesters involved in I and/or M? Why or Why Not?

- ❑ The group said “Yes, but with qualifications.” Group members supported harvester involvement because they felt that harvesters would have emotional ties to the area and some would be likely to want to get involved in a program that would help managers maintain the resources. In addition, the harvesters would have an understanding of the local ecology and community needs that others might not have, which could be useful in setting up the program. In addition, if you did an I&M program without harvesters, you’d likely encounter a lot of hostility from harvesters if you then used the data to develop new policies. By contrast, if harvesters were part of the process throughout, they would likely be less hostile and more likely to comply with any new rules. In addition, in some cases the harvesters have been on the land for many years, and feel a sense of ownership. They might be very upset if they weren’t included in an I&M effort that would potentially affect their ability to have access to the land. Another reason to include harvesters, is if they are involved in the process then peer pressure to adhere to the rules will be stronger.
- ❑ The group qualified these statements, noting that it would be important to set up an agreement in which harvesters would have to conduct I&M using mutually agreed upon protocols, and in which the protocols were structured in ways that could be replicated elsewhere. Additionally, though harvesters know a lot, there are some things they don’t know, and other stakeholders, such as scientists, who might know those things would need to be involved also.

2. How could you engage harvesters in I and/or M? (How could harvesters help you?)

- ❑ The group felt that the main things harvesters would have to contribute to an I&M program is information on location and abundance of various NTFPs. However, these are things they might not wish to share with land managers due to lack of trust. To overcome these trust issues, managers would need to provide incentives for harvesters to be involved. This would include things like:
 - Setting up standard contracts with harvesters, where they would be paid for their time.
 - Setting up goods for services contracts, where they would be allowed to harvest resources in exchange for their time spent doing I&M.
 - For volunteer situations, managers could pay harvesters’ travel and food costs. Note: Federal managers can provide such costs, but Pennsylvania State won’t allow managers to cover such costs.
 - Link harvesters with researchers, who would provide them training as well as access to knowledge produced through the I&M process.

3. What barriers do you foresee in involving harvesters in I&M? Brainstorm on how to overcome these barriers.

- ❑ **Maintaining long-term interest:** Provide harvesters with regular feedback about the results from the I&M effort – i.e. charts/graphs/tables showing yearly trends and statistics.
- ❑ **Fox in the henhouse fears/realities:** Harvesters bring a wealth of knowledge and some sense of ownership, but we need to have a check system to make sure that we catch any “bad” foxes (i.e. the harvesters who take too much product or harvest in ways that are destructive of the resources). One person added that we also need to have a check system to make sure that we catch any “bad” officials too. To ensure public and agency concerns about quality control, could have a built-in quality control monitoring system – example, in the management agency-harvester agreement, might include a proviso that the harvester assign numbers to the sites and then using a random sample technique, the researchers/managers would choose 10-15% of the areas for data verification.
- ❑ Another alternative would be to have a third-party data verification system. For example, the FS has such agreements with the Pinchot Institute for stewardship contracting.
- ❑ **FACA/Sunshine Laws:** The federal agencies are subject to the Federal Advisory Committee Act, and can’t hold meetings without inviting all stakeholders. Pennsylvania State has a similar type of sunshine legislation. As a result, federal land management agencies and at least some state management agencies may not be able to hold meetings that involve harvesters only. But they can encourage meetings where harvesters will show up by holding them close to the areas where the I&M is to take place.
- ❑ **Mistrust of what land managers will do with findings:** Agencies can set up non-disclosure agreements with harvesters so that the I&M data isn’t subject to Freedom of Information Act requests.
- ❑ **Generalized mistrust of agencies on part of harvesters:** Persons managing the I&M should be local agency people, not from outside headquarters.
- ❑ **Funding:** Adequate amounts and continuity are difficult to come up with. Harvesters need to understand that they can play a key role in influencing funding and the degree of upper management support by contacting their state and national congress representatives in person or by writing a handwritten letter.
- ❑ **Harvesters may not have all the knowledge and skills needed:** Need to establish mechanisms, such as links with university researchers, to provide training if necessary; also need to recognize that may need to have a mixed program including harvesters and others with different knowledge.
- ❑ **NTPF I&M efforts aren’t included in some forest management plans:** May need to revise/amend plans so that managers will be willing to allocate resources to implement I&M.

4. What would an ideal I&M program look like?

Key Components of a Program

- ❑ Establish why the I&M effort is important: it is especially important to be able to show harvesters why this is important to them.
- ❑ Identify what needs to be included in the I&M effort. Generally this would include at a minimum:
 - 1) the product(s) of concern,

- 2) indirect products (i.e. NTFPs that may be made available because of new management actions, such as bark due to timber sales);
- 3) numbers and quantities of these products,
- 4) scale at which I&M needs to be carried out.

- ❑ Who are the harvesters? What kind of knowledge/level of experience do they have?
- ❑ Means to acquire funding, i.e. harvesters may need to contact Congressional Representatives
- ❑ Potential partners (in funding and carrying out activities)
- ❑ System for reviewing the results and enforcing any provisions that arise out of the work
- ❑ Data analysis
- ❑ Sharing and discussion of results
- ❑ Process for adapting and adjusting the program, as well as management guidelines and requirements, in light of the results.
- ❑ Back to step a.....

Final Discussion

Some key points that came up repeatedly in the afternoon discussion include:

- ❑ Need **INCENTIVES** for harvesters to be involved. Probably needs to be immediate and direct (cash or access to land) but also long term incentive exists knowing that the resource will be sustainably harvested and maintained over time so harvesting can continue as a lifestyle. Jan adds, “I’ve thought a lot about this one – incentives – I don’t think it has to be cash which can be misused/misdirected, etc. Just look at the 90,000 volunteers for the Audubon Society who are giving out all the bird info free of charge! I think there are probably a lot more people than we would realize who would join in the I&M by their own free will if they thought that information wasn’t going to be used against them in the way of more regulations, etc.”
- ❑ The importance of developing **COLLABORATIONS**. Must be upfront and completely honest with everyone who is involved that results may have either positive or negative impacts on their harvesting practices. In other words, if inventory and monitoring reveals a plant is in danger, then steps will be taken to protect plant. But the key point is that if there is a problem, if a plant is in danger, then harvesters need to be part of the discussion and process of finding a solution. In collaboration.
- ❑ The importance of developing **TRUST** is critical. In this arena, often find that managers don’t trust harvesters to do the right thing (the media portrayal of raping and pillaging resources often prevails) and often harvesters don’t trust the government to take their needs into account. Building trust is a long-term and on-going process, but is critical.
- ❑ The need for **TRAINING**. Across scales and across publics. If we are to develop inventory and monitoring programs using harvesters, some form of training will be needed to ensure data is collected in similar manners to ensure data validity. However, we have also found that other

sectors need training regarding NTFPs. Land managers (district level, forest level, etc.) have expressed need for more information and are sometimes unaware of the diversity of species being harvested off the land. Training programs for land managers could help them understand not only the species on their district/forest, but also help them understand the complex cultural issues surrounding harvesting and could help foster better relationships between managers and harvesters, getting back at building trust.

- ❑ **FUNDING** is always the challenge. Need to figure out creative ways to fund inventory and monitoring work. Exploring how to involve harvesters is a direct response to this funding challenge, since we know that harvesters are already out in the field on a frequent basis, which could help reduce costs.
- ❑ Need to make efforts to **INVOLVE ENVIRONMENTAL GROUPS**. There was some concern that the groups who oppose timber harvesting on federal lands might also oppose NTPF harvesting. Several groups discussed how it would be important to do outreach and possibly even training with these groups, to illustrate the cultural and ecological potential of this type of activity. IFCAE has been exploring NTFPs as an alternative to dominant land use patterns in the west, and in research conducted by Portland State University students, they found that some radical environmental groups were actually open to the idea of harvesting wild foods and medicinal plants and did so when out in the woods. This is the possible opening needed to build good communication and understanding with these groups. Jan noted that the majority of harvesters in WV are also hunters and trappers, and that those radical groups basically hate them.
- ❑ The primacy of **ECONOMICS**. Many participants stressed the need for more economic data- in order to persuade others of the importance. It was pointed out that without a strong economic argument, no one is going to listen.
- ❑ Need **SOCIAL SCIENTISTS INVOLVEMENT**. Cannot do good NTPF research without it.
- ❑ Need to consider the role of non-commercial harvesters. It seems in the group discussions we all assumed working with commercial harvesters, but as presented in the morning, there are different types of harvesters, who could play different roles in an inventory and monitoring program.
- ❑ Issue of timing and seasons. For plants like ginseng harvesters are only out in the field once a year, in the fall, and there is a need to do census work in the spring, before the deer and turkey have browsed them. However, even folks who are harvesting ginseng are in the woods in early spring so they can see where the plants are, where they are going to dig, etc. and sometimes take measures to “cover the crop” so others won’t see it. Typical wildcrafters are in the woods from March through October.
- ❑ Internet has changed dynamics of harvesting. Internet postings to list-serves announcing when the ramps are up, morels fruiting, or when the berries ripe etc. can lead to increased numbers of harvesters coming to an area. Internet communication thus shares knowledge faster, to more people, than previously. (would be a good thing to study)
- ❑ Within the Forest Service, there is discussion regarding permitting for personal use. Without this permit data, don’t have a handle on the number of people going out or the quantity being removed for personal use. It could be that with increased communication and interest, there could be more removed via personal use. This of course, has administration costs associated with it, and could be perceived as the government trying to exert more control on the public, which could damage the trust building efforts.

- ❑ Important to recognize that not all harvesters are appropriate for an Inventory and Monitoring program. Some are fiercely independent and would not want to participate. Others have had negative experiences with the government, so the time to build trust to establish program may be prohibitive, given our need for data now. Plus, in every bunch of people, there are the ones who will harvest for their own economic gain regardless of long-term impacts to the plant populations or the integrity of the I & M program data collection process. So have to be savvy in who you include and how you deal with the percentage of people who don't want to participate.
- ❑ By the same token, harvesters and buyers have expressed a similar sentiment- that it is important to recognize that not all government officials are appropriate for an I & M program. They point out that government officials often do not know the land they are managing, do not understand the communities living in relationship with that land, and often have prejudices against the rural communities that hamper the development of working relationships and trust.
- ❑ Likewise, many harvesters and buyers have noted that it is not necessarily a bad thing to be digging for 'economic gain', that in fact the other more destructive uses of the forest (like development, logging, mining, etc) is done for economic gain at the expense of the ecological, biological and cultural communities in the area. They ask why their interest in earning a living from the forest is suspect when the big industrial logging and mining companies are given easy access to national lands.

Additional Comments added in the final review process:

- ❑ One observation - I think there are some east-west differences in tenure and attitudes toward resources that maybe did not come across as strongly as they could have. Ginseng was talked about a lot, but is a bit of an anomaly - its high price makes people get very restrictive about access and tight lipped about sharing information. For lower value products, there is not so much of a trespassing issue in many cases. In my neck of the woods, many neighbors will let people collect NTFPs from their property, just as they will allow them to hunt deer and other critters. This may be different further south, but for many folks here, access to resources is more a social and neighborly function of reciprocity (and perhaps this is because we still have a lot of old timer-families about). That is, I personally see less social friction here in Vermont, and thus less of an impetus to trade participation in an I&M program for continued access rights to resources. I could see this as a bigger issue for folks on big public lands out west.
- ❑ Regarding ginseng monitoring: The most reliable data on ginseng collection in PA is extracted from annual compilation of export receipts and dealer transaction reporting, (rather than through permitting data). These exports are tracked at the County level by having collectors report the County from which the ginseng was collected to the dealers. It is also verified, if you will, by the fact that dealers must take their ginseng to State Forest Districts to have the root inspected and weighed to receive approval for movement out of State. While there are considerable loopholes in this system (e.g. erroneous reporting of origin & illicit transport of ginseng across State lines), it nevertheless provides a good basis for evaluating the scale and perceived intensity of ginseng collection and trade. Permitting occurs sporadically throughout the state only where State Forests are concerned. The data that emerges from these permits is unreliable and essentially not useful since no quantities need be reported in this activity (a process which we are presently working to change).

- ❑ The following numbers were just reported to us (the subcommittee) the other day. They reflect the “permit” charge by item; that is, for some items like ginseng, a flat rate of \$5.00 covers unlimited harvesting (what a deal, huh!!!). For the other items like the firewood, the fee is altered based on quantity. Hope this helps. I will share any further information with you folks as it emerges.

 - Fuelwood - \$10.00/standard cord, max of 3 cords, no tax
 - Stone - \$5.30 for max of 2/12 tons
 - Ginseng - \$5.00, unlimited, no tax
 - Ground pine - \$5.30 for max of 1,000 pounds
 - Locust posts - \$0.50/post, no tax
 - For stone and ground pine, the \$0.30 is 6% tax on 5 dollars.

- ❑ I saw a PBS television show, called Chef's Afield last weekend (www.chefsafield.com). A woman named Anna Hoffman was showing the head chef of Earth and Ocean – a Seattle restaurant how she collects NTFPs! He prepared a couple of recipes with the mushrooms they collected. Anna seemed extremely knowledgeable and has been collecting for years.

- ❑ After the workshop there was a continuing discussion regarding whether offering permits (like hunting licenses) to harvesters would help reduce poaching. This is a topic that most likely will continue to be debated for some time.

- ❑ The idea of using GPS needs to be carefully considered. Can it be done so that privacy is ensured? Can it be used in a way that harvesters don't reveal their patches to everyone else? Many harvesters won't want to reveal their patches to the government or to anyone else.

- ❑ I feel I learned quite a lot about many things – about non-forest products (the photo presentations amazed me – especially those folks in the northwest with the mushroom permits); about some people who are genuinely interested in what they're doing (such as Eric Burkhart – I felt he would do well in any research project he set his mind to); how dedicated some folks are to this cause and how they seem to absorb information like a sponge (Marla – unbelievable person!); but I also must say my unfavorable opinion of government in general was enforced by the comments and viewpoints of some in attendance – the folks who think we're not smart enough to help with a survey, the folks who think we need to be 'trained' to locate and manage what we've been doing all our lives and what they probably can't even identify if it were right in front of them; the ones who think we're just like a bunch of 'land rapers' out here trying to make money like the 'bad' timber companies and the coal mines; and back to the person who thinks we won't participate because we don't want to pay taxes on our roots – geewhiz!! –. I realize that not all officials are 'bad', but by and large, I don't think they have a clue about how we feel about the land. We feel it is our heritage. Our responsibility, etc. It's about the only thing that some folks still treat with respect.

- ❑ Thank you again for allowing me to give a small amount of input to your conference. I doubt if my opinion is valued by any in attendance, but at least you allowed us a 'voice'. Thank you so very much. You and Eric are to be commended for you dedication and devotion to this project.

Workshop Evaluations

1. What did you like, or find useful, in today’s workshop?

Networking

- Networking and sharing of ideas and information.
- Networking with other people; the small group work
- The networking.
- Networking

Workshop Format and Atmosphere

- A very open forum of discussion.
- Great discussions
- Conversation
- Opinions, sharing, non-confrontation, respect for others.
- The chance to work in small group sessions and network.
- The group discussions were interesting and helpful.
- Break out sessions
- Very interactive – good questions for break-out groups to address
- I think we developed/expressed some excellent ideas.
- Participants brought a nice mix of experience and were very respectful of one another.
- Agenda was interesting.
- Activities were good mix of interaction and ‘lecture’
- The morning session was great at letting me know what NTFP monitoring exists and the importance of doing it.
- To know what’s going on throughout the country.

Multi-stakeholder Approach

- Group diversity
- Diverse backgrounds
- Good representation of U.S. government, state, NGO.
- I really enjoyed having such a diverse group! (More buyers and harvesters would be better).
- Diverse participants added to the discussion.
- Discussion with individuals involved different levels
- I think we got a nice idea (I did!) of where others are coming from and how they see NTFP issues/policy affecting their constituents/clients/themselves. I’m looking forward to the notes.
- It was good to have individuals from diverse backgrounds and viewpoints.
- The unique mix of participants
- The multiple views and ideas on monitoring

Facilitation

- Great facility and facilitators for session – got everyone involved.
- The facilitators did an excellent job keeping the group discussions motivated.
- Well organized
- It was well facilitated and prepared.
- You did an excellent job of bringing these concerns to light and generating great discussion of how to solve the issues involved with NTFP monitoring (way to stick to the agenda!)
- I got a better understanding of what it would take to get such a monitoring program in place.
- Meeting was productive.

Logistics

- The location was lovely
- Location was good.
- Lunch and snack were delicious
- Refreshments/lunch were REALLY GOOD!

2. What needs improvement?

- Nothing.
- None
- Cannot think of anything substantial.
- I thought everything went very well.
- It is a good approach and shouldn't be altered much – Keeping a similar format makes regional comparisons more consistent too.
- Could use more harvesters--probably would need to pay their way.

Note: some participants felt that this recommendation implied that harvesters wouldn't attend on their own because they are ignorant back-woods hicks. The position of the Institute for Culture and Ecology on the issue is that we make small funds available to harvesters to attend our workshops out of respect, recognizing that in order to come to the workshop a harvester/buyer must forfeit a day working and because we recognize that many of the other participants are on salaries, and thus are paid to attend the workshop and do get their expenses covered by their employers.

Small group logistics

- Morning session – our group was too small, best to have 6 or more people with a facilitator for each.
- Additional time for the work groups possibly.
- Maybe another little “icebreaker to know you” in the first break-out group to facilitate that, but really it was all great.
- Time for group work needs adjustment – First session was too short and the last one was too long.

Future?

- Do not let this die.....
- We need a follow-up workshop to build on the ideas brought forth through our discussions.

Content

- A little more clarity on what this day is about should be included with the initial announcement, perhaps attach the agenda.
- I think the objective on “illustrating the need for monitoring” needs to be strengthened. Personally I feel the need for it but you need to give cut and dry reasons and needs.
- Questions at times too leading, eg assumed that harvesters would be involved in I&M
- The end information sought
- Preprinted agenda and list of attendees
- Have hand-outs of powerpoint presentations to take notes.
- Could use a microphone for your principal speakers

3. Were your expectations for the workshop met? If not, why not, and how could we do better?

- Yes.
- Yes
- Yes

- Yes.
- Yes
- Yes
- Yes, good discussions with people from a variety of backgrounds. This was well done (I have attended many!!)
- Yes, more than I expected, learn the views and interests of others.
- Yes, my expectations were exceeded. I learned a great deal about NTFPs – challenges, etc. Enjoyed networking.
- Yes – but actually I learned more than I expected! I was hoping to learn more about the quantitative/qualitative effects that wild harvesting has on our ecosystems, however I realize now that is part of what needs to be studied!
- We met the expectations as described as a group, and therefore mine were met.
- Sure, but I did not know what to expect
- Somewhat. I'm still unsure if the data is geared to public or private land managers.
- Funny thing – I didn't have many! I didn't really know what it was going to be about, but I was very pleasantly surprised! Thanks so much and I am so pleased to have met all of you.
- Honestly I had no idea what to expect, but I anticipated more information/presentations by the program hosts as opposed to us having such a large role. I think that this was good because it required more critical thinking.
- This was a very enlightening experience for me into a subject but I unfortunately have limited knowledge
- Not really – I was more interested in figuring out how to 'sell' NTFP to non-industrial private forest landowners than learning about harvesters needs, which means I misinterpreted the intent of the workshop. However, I learned from the workshop and met people I can network with.
- Not really (and this is my problem, not yours!) – as a neophyte I'd hoped to learn more about what kinds of NTFP there are, plus their locations, use, misuse in our area.

4. Other comments? Criticisms? Opinions? Insights?

Content

- There were many “double sword” issues that came up and perhaps there needs to be a more in-depth discussion to arrive at a fuller understanding.
- It was nice to have met you and I was very impressed by the variety of persons involved in the meeting. I go to too many meetings where those only involved are cerebral thinkers who have no actual field experience. The number of different organizations and people represented was a welcome site and made the meeting a much more productive use of time and sharing of ideas and experiences. I look forward to be involved in any future discussions and if I can help in any way to assist you or your organization let me know.
- The morning presentations clearly laid out what I & M looks like and how it works in real instances. Then you let the participants explore for themselves the pros and cons of such an approach. The only change I might suggest on the basis of this observation would be a slight rewording of the first workshop objective to read something like "Describe nontimber forest product (NTFP) inventory and monitoring efforts that involve harvesters." The key message I

wanted to convey is that the workshop operates at an even greater level of participatory integrity than the team may realize.

Future?

- ❑ I really hope we have some type of follow-up. We don't want to drop the ball now that we've got momentum. Thank you for your efforts to bring these concerns to light.
- ❑ This needs to be a continuing process, future meeting dates of this or other groups.
- ❑ Where do we get information on future and current meetings on this subject?
- ❑ Provide additional workshops on the ecological needs of some of the more important plants – soils, moisture, shade/full light, etc. How to market these plants.

Process

- ❑ Thank you – will check in at your website to see how you interpreted the day's efforts
- ❑ Thank you for having all information including the powerpoints on the website.
- ❑ I await your print-out.
- ❑ A great opportunity to network. I made a ton of contacts to help with our parks program.

Facilitation

- ❑ Excellent organization and facilitation.
- ❑ Toothpick activity was a good 'creative warm-up'
- ❑ Very good job, my compliments to the team.
- ❑ Very productive meeting – THANKS!
- ❑ (smiley face)

Workshop Review Process

- ❑ Overall, I think you have done a great job capturing the discussion...at least with respect to the discussions I was involved in. Nice work! And so quickly pieced together!
- ❑ Nice job capturing the essence of the workshop.
- ❑ Thanks for the workshop notes. They look good and I don't have any real substantive things to add.
- ❑ Great job in putting all this together. Just a few edits. Please see attached.
- ❑ I reviewed the notes and they look OK to me.
- ❑ Thanks again for conducting the workshop, I really learned a lot.
- ❑ Good job on writing up the notes! Looks like you captured everything very well.

IFCAE responses: Thanks for your feedback. We really appreciate your time and input. Just briefly, we agree on your comments regarding the small group logistics and will work on this for the next workshop. I have also revised the announcements to be sent out in the Pacific Northwest to include the agenda as per your recommendations. Also, I wanted to let you know that we do have funds set aside for harvester involvement, and did offer cover expenses for harvesters to attend. Even with this concerted effort, we have had little success in getting harvesters to meetings. Our take home message from this is that formal meetings may not be not the best way to involve harvesters. We anticipated this, and that is exactly why we are spending most of our time in the field talking with harvesters.

You are invited to a special one-day workshop

Harvester Involvement in Inventorying and Monitoring of NonTimber Forest Products

Date: Thursday, September 4, 2003

Time: 8:30 am to 5:00 pm

Location: World Forestry Center

4033 SW Canyon Rd., Portland, OR

(just west of downtown, off Hwy 26W, Forestry Center/Zoo exit, or
take Trimet Bus #63 or Westside MAX light-rail to the zoo stop)

Geographical Focus: WA, OR, CA

Purpose of the Workshop: To bring together those people interested in the sustainable management of nontimber forest products—including federal, tribal, state, and private land managers, policy makers, scientists, buyers, and harvesters—to explore how harvesters might participate in a comprehensive biological monitoring program.

Context: This workshop is part of a national study funded by the National Commission on Science for Sustainable Forestry (NCSSF). www.ncssf.org

Registration: This workshop is free and open to the public. *However, pre-registration is requested. Please contact Katie Lynch no later than August 22, (503-320-1323, ktlynch@ifcae.org).

Organized by the Institute for Culture and Ecology

www.ifcae.org • 503-320-1323 • PO Box 6688 Portland OR 97228

PLEASE DISTRIBUTE WIDELY

EMAIL ANNOUNCEMENT

Please Circulate: A Special Free Workshop

Involving Harvesters in Inventorying And Monitoring Of Nontimber Forest Products (aka Special Forest Products) in the Pacific Northwest region, (including Washington, Oregon and northern California.)

Date: Thursday, September 4, 2003

Time: 8:30 am to 5:00 pm

Location: World Forestry Center

4033 SW Canyon Road, Portland, OR.

(Directions and a map are available at: www.worldforestry.org/directions.html)

Who Should Attend:

Anyone interested in the sustainable management of nontimber forest products, including federal, tribal, state, and private land managers, harvesters and buyers, extension agents, policy makers and scientists from the states listed above.

Purpose of the Workshop:

To explore how harvesters might participate in a biological monitoring program of nontimber forest product resources (such as wild mushrooms, floral greens, medicinal plants, seeds, etc.).

Registration:

This workshop is FREE and open to the public. ** However, pre-registration is requested. For more information and to pre-register, please contact Katie Lynch no later than August 22, 2003 (503-320-1323, ktlynch@ifcae.org). Space is limited, so please register to reserve your spot in the workshop.

Format:

This participatory workshop is built around small group activities and interactive discussions. We will be seeking your input on the following:

- Current inventory and monitoring efforts of NTFPs
- Potential barriers to including harvesters in inventory and monitoring and how to overcome them
- Your recommendations on the design and implementation of a pilot program that would involve harvesters in inventory and monitoring.

Lunch will be provided. Please let us know of any dietary restrictions.

Background:

This workshop is part of a national study funded by the National Commission on Science for Sustainable Forestry (NCSSF) www.ncssf.org. The project's goal is to assess the relationships between forest management practices, nontimber forest products (NTFPs), and biodiversity in the U.S. For more information, visit our website: www.ifcae.org

For more information on NTFPs visit www.ifcae.org/ntfp/

Organized by the Institute for Culture and Ecology

www.ifcae.org 503-320-1323 PO Box 6688 Portland OR 97228

In-kind support generously provided by the World Forestry Center.

**Special One-Day Workshop:
Harvester Involvement in Inventory and Monitoring of Nontimber Forest Products**

Thursday September 4th, 2003 8:30am – 4:30pm
World Forestry Center
Portland, OR

Workshop Objectives:

1. Describe various NTFP inventory and monitoring efforts that involve harvesters;
2. Share our preliminary research findings for review and comment;
3. Discuss some of the concerns and possibilities surrounding the inclusion of harvesters in an inventory and monitoring program of NTFPs;
4. Build networks with other stakeholders in the region with an interest in NTFPs.

Workshop Agenda:

8:30 – 9:00	Registration and Breakfast Mingling
9:00 – 9:30	Welcome and Introductions
9:30 – 9:35	Overview: Workshop Objectives and Agenda
9:35 – 10:30	Presentations: Overview, Definitions and Case Studies
<u>10:30 – 10:45</u>	<u>Morning Break</u>
10:45 – 11:00	Presentations: Preliminary Findings
11:00 – 12:30	Regional Inventory and Monitoring Case Studies and Group Discussion
<u>12:30 – 1:30</u>	<u>Lunch</u>
1:30 – 3:00	Small Group Work: Harvester Involvement in Inventory and Monitoring
<u>3:00 – 3:15</u>	<u>Afternoon Break</u>
3:15 – 4:15	Plenary Presentations and Group Discussion
4:15 – 4:30	Final Wrap-Up and Evaluations

Participant List

Harvester Involvement in Inventorying and Monitoring of Nontimber Forest Products

Thursday September 4th, 2003
World Forestry Center, Portland, OR

Susan J. Alexander

Research Forester
USDA Forest Service
Pacific Northwest Research Station
3200 SW Jefferson Way
Corvallis, OR 97330
541-750-7417; Fax: 541-758-7760
salexander@fs.fed.us

John Arena

Bureau of Indian Affairs, Warm Springs
P.O. Box 1239
Warm Springs, OR 97761
541-553-2416; Fax: 541-553-2432

Katie Bagby

Coordinator
Pacific West Community Forestry Center
PO Box 11
Taylorsville, CA 95983
530-284-1022, x. 16; Fax: 539-284-1023
kbagby@fcresearch.org

Heidi Ballard

Graduate Student
151 Hilgard Hall
Dept. of Environmental Science, Policy and
Management
University of California, Berkeley
Berkeley, CA 94720
hballard@nature.berkeley.edu

Dennis Beckner

Special Forest Products Coordinator
Middle Fork Ranger District
Willamette National Forest
46375 Highway 58
Westfir, OR 97462
541-782-5351
dbeckner@fs.fed.us

Joyce Berry

NCSSSF Project Steward
Associate Dean, College of Natural Resources
Colorado State University
Fort Collins, CO 80523
970-491-5405; Fax: 970-491-2709
joyceb@cnr.colostate.edu

Susan Charnley

Research Social Scientist
USDA Forest Service
Pacific Northwest Research Station
PO Box 3890
Portland, OR 97208
503-808-2051; Fax: 503-808-2033
scharnley@fs.fed.us

Angie DiSalvo

International Programs Manager
World Forestry Center
4033 SW Canyon Rd.
Portland, OR 97221
503-488-2137
adisalvo@worldforestry.org

Frank Duran

Region 6 SFP Program Manager
US Forest Service
333 SW First Street
Portland, OR 97204-3440
503-808-2970; Fax: 503-808-2469
fduran@fs.fed.us

Jim Freed

Extension Agent, Washington State University
1111 Washington Street, S.E.
Olympia, WA 98504
360-902-1314
freedj@wsu.edu

Christy Getz

Assistant Cooperative Extension Specialist
Division of Society and Environment
135 Giannini Hall #3312
Berkeley, CA 94720-3312
510-642-8681; Fax: 510-643-2504
cgetz@nature.berkeley.edu

Talya Holladay

Bureau of Indian Affairs, Warm Springs
P.O. Box 1239
Warm Springs, OR 97761
541-553-2416; Fax: 541-553-2432
talya_h@hotmail.com

Kimberly Hudnall

Student Trainee
Natural Resources Conservation Service
Corvallis Plant Materials Center
3415 NE Granger Ave.
Corvallis, OR 97330-9620
541-757-4812; Fax: 541-757-4733
naknuwisha@msn.com

Sandra D. Jones

Consultant, National Network of Forest
Practitioners
PO Box 1298
St Helena Island, SC 29920
314-383-5762; 843-838-8552
penncent9@yahoo.com

Bill Knight

Harvester
1907 Olympic Hwy. North, # 4
Shelton, WA 98584
360-427-7029
bill_knight@hotmail.com

Linda Kruger

Research Social Scientist
USDA Forest Service
Pacific Northwest Research Station
2770 Sherwood Land, Suite 2A
Juneau, AL 99801
907-586-8811 x. 222; Fax: 907-586-7848
lkruger@fs.fed.us

Phil Lacy

International Fellow, Australia
World Forestry Center
4033 SW Canyon Road
Portland, OR 97221
503-488-2122
placy@worldforestry.org

Leon H. Liegel

Research Associate, Department of Forest
Science & Sustainable Forestry Partnership
009 Peavy Hall, Oregon State University
Corvallis, OR 97331-5752
541-737-4991; Fax: 541-737-2668
leon.liegel@orst.edu

Pamela Martin

Oregon's Wild Harvest
43464 SE Phelps Rd.
Sandy, OR 97055
604-668-7713
pam@oregonswildharvest.com

Erin Paige Mirrett

Farm Program Manager, Oregon Tilth, Inc.
470 Lancaster Drive NE
Salem, OR 97301
503-378-0690; Fax: 503-378-0809
erinm@tilth.org

Raymond "Captain" Moody

Chair, Timber Committee
Confederated Tribes of Warm Springs
PO Box 1299
Warm Springs, OR 97761
541-553-2416; Fax: 541-553-2432
rmoody@wstribes.org

Patrick Mooney

Owner, Forever Green Tree Farms/
Tanglefoot Accents
35379 Brabhan Road
Pleasant Hill, OR 97455
541-746-2864; Fax: 541-746-1885

Andy Moore

PO Box 1141
Cave Junction, OR 97523
541-592-2700
matsiman@matsiman.com

Patricia Muir

Professor, Department of Botany & Plant
Pathology, Cordley 2082
Oregon State University
Corvallis, OR 97331-2902
(541) 737-1745
muirp@science.oregonstate.edu

David Pilz

Botanist, Department of Forest Science
Oregon State University
321 Richardson Hall
Corvallis, OR 97331-5752
541-750-7362; Fax: 541-737-1393
david.pilz@oregonstate.edu
or (541) 753-6209, shroom@peak.org

Melissa Poe

Doctorate Student, Environmental
Anthropology, University of Washington
Box 353100
Seattle, WA 98195-3100
206-760-2790 (home)
mpoe@u.washington.edu

Nanda Shewmangal

Cultural Diversity Coordinator
National Network of Forest Practitioners
305 South Main Street
Providence, RI 02908
401-273-6507; Fax: 401-273-6508
nanda@nnfp.org

Dr. Moris L. Silber

Research Professor, Department of Natural
Research Sciences
Washington State University
Jonson Hall, Room 109
Pullman, WA 99164-6410
509-335-7756; Fax: 509-335-7862
silber@mail.wsu.edu

Denise Smith

Forest worker/harvester
Trinity Alps Botanicals
P.O. Box 251
Willow Creek, CA 95573
530-623-7058
dssmithcn@yahoo.com

Grace Wang

Assistant Professor of Environmental Studies
Western Washington University
Dept of Environmental Studies, MS-9085
Bellingham, WA 98225
360-650-3278; Fax: 360-650-7702
grace.wang@wwu.edu

Stacie Watne

Forester, USDA Natural Resources
Conservation Service
3867 Wolverine St. Suite 16
Salem, OR 97305
503-399-5741 x 117; Fax: 503-399-5799
stacie.watne@or.usda.gov

Emilio N. Williams

President, The Koi Group
P.O. Box 305,
Riverdale, Maryland 20738-0305
301-779-7391; Virtual Office: 301-346-5715;
Fax: 301-779-0389
ewilliams@koigroup.com

Galy Yang

Technology Specialist
Chinese Forestry Association
3F, 13, Bly 29, Ln 55, Sec 1, Shingling Road
Taipei, Taiwan 116. Republic of China
+886-2-29309566
galy@landresources.org

Institute for Culture and Ecology Team:

Eric Jones

Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-320-1323 (cell), 503-331-6681 (office)
etjones@ifcae.org

Kathryn Lynch

Workshop Facilitator
Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-320-1323 (cell), 503-331-6681 (office)
ktlynch@ifcae.org

Rebecca McLain

Institute for Culture and Ecology
PO Box 6688, Portland OR 97228
503-331-6681 (office)
mclain@ifcae.org

Phil Janik

IFCAE Board of Directors
Retired, USDA Forest Service
PO Box 6688, Portland OR 97228
503-331-6681
mgmtscicol@aol.com

Tom Love

Regional Liaison for the PNW
Dept. of Sociology and Anthropology
Linfield College
McMinnville, OR 97128
503-883-2504; Fax: 503-883-2566
tlove@linfield.edu

Sarah Workman

Regional Liaison for Southeastern U.S.
1340 Sunset Ridge
Watkinsville, GA 30677
706-614-8457 (cell); 353-846-3496 (office)
sworkman@ufl.edu

Morning Presentations

Project Overview. Katie Lynch

- Context
This workshop exploring “Harvester Involvement in Inventorying and Monitoring of Nontimber Forest Products” is part of an 18-month national study funded by the National Commission on Science for Sustainable Forestry (NCSSF)
- The Project Objectives include:
 - 1) Research the role of NTFP management in forest ecosystem sustainability and biodiversity.
 - 2) Support the ability of U.S. forest managers to assess NTFP sustainability.
- The Project Consists of Five Components:
 - 1) NTFP Species Database Expansion
 - 2) NTFP Bibliographic Database Expansion
 - 3) National and State Forest Survey Expansion
 - 4) Ethnographic Fieldwork
 - 5) Four Regional Workshops, of which this workshop is the fourth and final one.
- Research Sites and Timelines
 - 1) Rocky Mountain Region- Fall 2002
 - 2) Southeast Region- Winter 2002-2003
 - 3) Northeast Region- Spring 2003
 - 4) Pacific Northwest- Summer 2003
 - * Project completed December 2003
- Map of Bailey’s Ecoregions
- Why this Study?
 - Challenges to Managing NTFPs
 - Limited Budgets
 - Limited Personnel
 - Limited Time
 - Legal Mandates
 - Limited Data (ecological and sociocultural)
- NTFP Data Gaps
 - Density and distribution of resources
 - NTFP population structure and productivity
 - Ecological impact of harvesting
 - Economic, political, and cultural factors affecting harvesting
 - Impacts of forest management on NTFPS.

This last one is important and often forgotten. We often focus on the impact of harvesting without contextualizing it within the bigger landscape land-use issues. So not only do we need to research what is the impact of different harvesting techniques to be sure we are using/promoting best practices, but we also need to understand how other land management practices are influencing NTFPs. How does logging, grazing, road building, development impact populations of NTFPs and what does that mean for biodiversity conservation.

- ❑ There is a documented need for more inventory and monitoring efforts. These workshops respond to that. For example, the US Forest Service’s National Strategy for Special Forest Products. FS-713. August 2001 states, “We need more knowledge of how harvesting and collecting SFPs affect species and ecosystems...Many of these species do not appear in monitoring and inventory databases.” (USFS, 2001: iii)
- ❑ Likewise, at the regional level studies have documented the need for better inventory and monitoring efforts. For example, Hyatt, Phillip E. 1993. Collecting Products from National Forests. Region 8 Assessment. In this document, he writes, “We should be MANAGING for the species that are sold under small products permits; ...this will require a significant effort in inventory, analysis and planning.” (Hyatt, 1993: 5).
- ❑ Why this workshop?
We want your input on how we can respond to the stated need for more inventory and monitoring and thus help fill in some of the data gaps mentioned above.
- ❑ Defining terms: So what do we mean by Nontimber Forest Products?
There is no single easy definition, and no agreement among different stakeholders on the most appropriate term. Forest Service uses the term Special Forest Products, timber companies often use the term Minor Forest Products. In all, it is clear that the term is not biological or ecological category, but rather a political category. In our definition, we include the following:
 - Medicinal plants, like the Pacific Yew.
 - Wild foods, like chanterelles and wild greens.
 - Native seeds, used for reforestation and re-vegetation projects.
 - Floral greens, like salal, ferns and moss.
 - Arts and Crafts materials, like sweet grass for baskets in the SE, or pine cones or grapevines.
 - Decoratives, like these pitcher plants gathered for this floral display.
 - Plant Dyes, like yarrow and goldenrod shown here in a Taos, NM shop.
 - Wildlings or Transplants, like these aspens that are gathered for the nursery business.
 - Resins and saps, like turpentine in the SE and maple syrup up in the NE.
 - Pine straw, which is collected from tree plantations in the SE for mulch for the nursery industry.
 - Fuelwood.
 - Poles and Posts, like latillas and vigas in the SW and throughout the west.
- ❑ Take Home Point
Hundreds of species are harvested in the United States, for a wide array of end uses.

Inventory and Monitoring Overview. Rebecca McLain

- ❑ Definitions
 - To inventory is to survey and quantify single or multiple species found in an area.
 - To monitor is a process of observing species, ecosystems and landscapes over time to detect changes.
- ❑ Benefits of I & M:
 - Develop greater understanding of biological diversity/ecosystems
 - Detect changes over time and space
 - Enhance ability to predict future trends

- Help determine marketability and sustainability
- Informs/improves management decisions

□ NTFPs Slip Through U.S. Forest I & M Efforts

Federal FIA/FHM Programs.

- Emphasis is on trees
- Spatial grids and temporal scales need to be altered for NTFPs
- Frequently lack adequate budgets
- Traditionally tree focused, but more NTFPs

Natural Heritage Network/ NatureServe

- Focus on rare species
- Variability across state programs

□ Cost of Labor is a Major Impediment to NTFP Inventorying and Monitoring

Types of Labor

- Permanent staff, Contract labor, volunteers (which are never free, since they require time to train and supervise)

Labor Costs

- FIA Strategic Plan project labor around 50% of total costs (\$82 M)

□ How Can We Afford to do Detailed NTFP Data Collection?

- Two possibilities to consider:
 1. Volunteer programs
 2. Commercial harvester involvement

□ Benefits of Participatory Approaches

- Can have low cost-benefit ratio to procuring data
- Increases public support/ pride/ownership in project
- Participants become educators
- Participants become the eyes and ears of the forest

□ Issues to Consider

- How to identify and recruit participants
- Sustaining interest
- Organizing and training
- Supervision demands
- Data validity
- Data management
- Preferential treatment/ access
- Intellectual property rights/ mutual benefits for all involved

□ Degrees of Participation chart.

There are various levels of participation, ranging from “co-option” to “collective action.” We believe that the most effective modes of local participation falls in between these two extremes— as “collaboration” and “co-learning”. In collaboration, local people work together with outsiders to determine priorities; outsiders have responsibility for directing the process. The role of local people is collaborators, and the potential for sustaining local action and ownership is increased.

In co-learning, local people and outsiders share their knowledge to create new understanding and work together to form action plans; outsiders facilitate. The role of local people is as partners, and the potential for sustaining local action and ownership is further increased. (adapted from Cornwall, 1995, in Carter 1996).

- Examples of cases where volunteers have been involved with I & M.
 - Audubon Christmas Bird Count, 1999-2002.
 - The Nature Mapping Program, in Washington.
 - Medicinal Plant Working Group- Cohosh and Bloodroot Study in North Carolina
 - Matsutake Mushroom Monitoring in Central and Southwestern Oregon
- Take Home Points
 - 1) Commercial harvesters and buyers initiate I & M efforts and participate in outside-initiated I & M efforts
 - 2) Commercial harvesters and buyers can play key roles in research design, data collection, data analysis, and dissemination of results.

Some Preliminary Project Findings. Eric Jones.

Now that you have been introduced to the overall research project, and some discussion on inventory and monitoring, we will move into presenting some of our preliminary findings.

- Ethnographic Research Component
Objectives: 1) To determine the importance and potential role of harvester knowledge to forest management and science, specifically inventory and monitoring; 2) To synthesize harvester knowledge concerning forest management impacts on biodiversity.

We spent most of our time in the field talking with harvesters with the intent of ensuring that harvesters voices were part of our final report, and to get their voices into the workshop even if they were unable to come to this workshop.

- Methods and Preliminary Findings
 - Study builds on 10 years of research with NTFP harvesters.
 - 100s of hours of participant observation
 - 132 formal ethnographic interviews to date
 - 100s of informal interviews with managers, researchers, businesses, etc.
- Defining terms: So what do we mean by “Harvester”
This typology is meant to illustrate the diversity of harvesters, and not to pigeon-hole anyone. Many harvesters fall into various categories at different times and many folks don’t use the term “harvester”-we met folks who call themselves root diggers; salal, mushroom and berry pickers; wild foods foragers, etc. But this general typology below is useful to illustrate a few of the motivations for why people harvest NTFPs.
 - Subsistence harvesters- collect for personal or household consumption.
 - Commercial harvesters- collect for trade or cash, across scales from small mom and pop shops to large international operations.
 - Recreational harvesters- collect for pleasure, recreation, exercise, hobby.
 - Healers- gather plants they use for treating illnesses.
 - Spiritual harvesters- collect for spiritual endeavors, or treat NTFPs as sacred objects.

- Scientific harvesters- formal or amateur scientists, that harvest or reserve areas for observation or study.
 - Educational harvesters- collect for educational purposes.
- Take Home Point
- Harvesters are NOT homogeneous. They have differing:
 - Motivations, values, ethics
 - Economic circumstances
 - Political conditions
 - Cultural traditions
 - Experience and knowledge

□ So Why Involve Harvesters?

The following is a list of reasons that have emerged from our research, and each point includes a representative quote from a harvester that illustrates the point.

- They are often in the field on a daily or weekly basis.
 “I go back to the same places...so I can tell the health of what’s going on. I’m always amazed to find what goes on with populations. Now I can see over [the] years how drought effects these trees, how it effects these plants. How the cows effect the herbs or not.”
- They have often developed an intimate relationship with the ecosystems where they harvest.
 “That’s one of the things I tell people about wildcrafting. It’s like, well, you go and you may be able to pick depending on how the stand is doing but more than anything you’re monitoring that spot. It’s like your own little area in the woods that you check on.”
- Many have developed guidelines and stewardship practices to protect the resources they harvest.
 “There’s only one accessible place nearby where it grows and we have been collecting there over and over, over the years. And finally I’ve decided that I really don’t think I should collect it there anymore, even though there are still at least two hundred plants there. But I just feel like we’ve used it for too many years.”
- Many have deep respect for the plants they gather and a stewardship ethic.
 “You respect the forest because the forest gives to you, and to just take without being careful, you are actually going to destroy yourself in the end. You have incentive to keep the forest up.”

 “Good management starts with myself, making sure that I pick the right way. If I am around a bunch of people who are being disrespectful I will tell them what I think. I will even try to show them a better way to do it.”
- They often make critical observations.
 “When I’m in the forest my mind focuses on figuring out as much as I can about the mushroom habitat. I try to figure out what I’m doing that could be screwing things up by being there picking...I try and not do anything that could be permanent. Like I never pull mushrooms because that might rip into the roots or mycelium. I always try to eat my lunch in a good patch before I’ve picked it. I’ll sit on my bucket and try and observe every little detail from slug slime trails, to light quality and quantity, to moisture, to tree

type. If it's not raining I sometimes take notes on any changes I've seen. I've got a few patches that I'm sure nobody else picks and those are the best because I can get a better idea of what effects I'm having. Those patches produce the best and I think it is because I'll always leave raisins [smaller sizes]."

➤ Some engage in experimentation.

"We take all the trimmings [waste] back to the woods... With the Lobster [mushrooms] that don't make it as a No. 1 grade, some [pickers] take and cut it up, and put it back in the forest. Every year it's gotten better and better. They say that by going out and basically seeding this area that the productivity is getting better."

➤ Many want to main their quality of life- which includes valuing self-sufficiency, their ability to set their own hours and be their own boss, being in the forest not in the city or in a factory job, having a small business or supporting small local businesses, and passing on family traditions.

"I'd rather make half the money working for myself than getting rich [working] as a robot for some corporation, a corporation that will dispense of me when they tire of me."

➤ Because they are critical stakeholders- who depend on sustainable harvests for income or for household use.

"Over the last seventeen years I have had about fifty patches I regularly visited. I figure I've walked over a 1,000 miles scouting alone. I've got a name for each one...I only have about twenty [patches] left because most have been logged or locked up. The first few years I felt it was their right, logging was the most important thing...but as I got better at picking I realized how much could be made with just mushrooms alone. I had this patch that spread over two hills, bigger than a football field, and in the fall it would be a carpet of orange [chanterelles]. When I saw it marked for logging I went to the ranger to protest. I told him there was no patch like it, but they logged it anyway. I've never gotten over that one; they desecrated something sacred."

❑ Take Home Point

Given these many factors, harvesters could be particularly valuable in helping design and implement NTFP inventory and monitoring programs. It is worth exploring at the very least.

❑ Take Home Point

It is also important to explore how policies and management activities might promote or undermine stewardship attitudes and behaviors.

❑ In Summary

- Managers need accurate information to make sound decisions..
- Yet, there is limited data (ecological, cultural, economic...)
- Managers face: limited budgets, time, staff and legal mandate to manage natural resources for multiple use and sustainability.

❑ In Summary

- Thousands of people across the U.S. spend regular time in forests harvesting NTFPs.
- Harvesters are diverse, and often very knowledgeable and concerned.
- A participatory strategy is worth exploring.

Case Study Presentations

Heidi Ballard: “Harvester Knowledge and Science A Case of Involving Mobile Forest Workers in Ecological Research in Olympic Peninsula, Washington.” Department of Environmental Science, Policy and Management, University of California, Berkeley. hballard@nature.berkeley.edu

The non-timber forest product (NTFP) industry in the Pacific Northwest of the United States has been gaining momentum over the last 15-20 years. Harvesters of these NTFPs have a strong interest in maintaining the sustainability of the resource. The Northwest Research and Harvester Association (NRHA) in Mason County, Washington was created by harvesters to address the variety of ecological, social and management problems currently affecting harvesters and resource managers of NTFPs in this region. Part of the NRHA’s mission is to help conduct research and monitoring on harvest impacts on the land they manage. Ballard, a researcher from the University of California, Berkeley, collaborated with the NRHA to examine the relationships between tenure institutions, harvest practices and sustainability of the resource by conducting participatory research with harvesters on the impacts and sustainable levels of harvest of a shrub called salal (*Gaultheria shallon*), used as a floral greenery. From 2001 to 2003, harvesters and land managers (both public and private) have participated in all aspects of designing and conducting the study, including but not limited to:

- Choosing the appropriate plot locations of represent real harvest conditions.
- Developing the precise research question within the larger question of harvest intensity impacts.
- Developing hypotheses about particular ways the plants will respond to harvest.
- Designing methods to measure impact on regrowth on the plant.
- Defining the harvest treatments to be tested based on actual harvest practices.
- Collecting data for the 2 ½ years of the study.
- Interpreting the results after the researcher completes the statistical analysis.
- Develop management recommendations based on experimental results and local knowledge and experience.
- Dissemination of the results of the research to harvesters, public and private land managers and research scientists in the region.

This work will provide both the landowner and harvesters with the ecological information they need to manage the harvest of salal, but just as importantly, the process of participatory research on sustainability will provide concrete links between harvesters and public and private land managers, and potentially provide a foothold for civil science within forest management agencies.

Andy Moore: Masutake Mushroom Monitoring in southern Oregon

Please see www.matsiman.com for a complete overview of Andy’s presentation and a variety of other useful information regarding matsutake mushrooms.

Denise Smith: Trinity Alps Botanicals and Medicinal Monitoring in Northern California

This case illustrates how the concerns of wildcrafters and traditional plant gatherers over the effects of herbicide use by the Forest Service, coupled with concerns by the same groups and others over the sustainability of harvesting plants for bulk commercial use, and tribal concerns about encroachments on their aboriginal gathering rights led to the evolution of several wildcrafter/traditional gatherer initiated processes to improve NTFP management in the Six Rivers National Forest area.

Harvester Involvement in I & M	Harvesting Standard and Guidelines	Tribal Gatherers Working Group
<p>The process originated with Trinity Alps Botanicals harvesters and involved a traditional gatherer, Sherlette Colegrove and an ethnobotanist, Karen Theiss, to develop an inventory method for traditionally gathered plants. The study looked at 10 plants, and focused on understanding their botany, mapping their locations, documenting the types of harvesting, and doing some photo monitoring.</p>	<p>Using and expanding upon the information gathered through the studies noted in column one, TAB developed a manual of standard and guidelines for wildcrafting in their area. They also worked on training harvesters in proper techniques. This resulted in a working document which they can adapt over time.</p>	<p>As TAB evolved, John Larson of the Six Rivers NF invited TAB, district rangers, and tribal representatives from 6 tribes to take part in the tribal gatherers working group meetings. They had 10 meetings over the course of a year.</p>
<p>At about the same time, a group of herb growers who had formed a cooperative to sell their products joined forces with a landscape ecologist, Yvonne Everett, now at Humboldt State University, to develop a monitoring program for Prince’s Pine and Oregon Grape. This experiment included plots with a range of treatments from 100% removal to no removal, and also contrasted cutting versus pulling methods of harvesting. The experiment took place over a 5 year period.</p>	<p>The manual addresses: quality control, dry herbs and fresh herbs, conducting follow-up site inspections, permits and obtaining permission to harvest on public and private lands, a species list, and harvesting guidelines.</p>	<p>The process resulted in each ranger allowing the people who attended and who lived and harvested in their district to comment on sustainable harvest for each plant on the FS list of commercially harvestable plants.</p>
<p>As this work progressed, the members of TAB decided that harvesting for bulk sale was not sustainable economically or environmentally.</p>	<p>Key tools in the manual: Wildcrafters check list Harvest information sheet</p>	<p>As a result of the process, the districts placed quantity restrictions on each plant for commercial harvest.</p>
<p>They thus shifted to value-added products, such as tinctures, salves, and oils. These use smaller amounts of cultivated and wildcrafted herbs. They also shifted toward harvesting in ways that they had learned from both the experimental study and the ethnobotanical study of traditional harvesting practices would promote healthy plant populations.</p>	<p>Key control component: TAB only purchases products from wildcrafters who complete the training, fill out the required paperwork, and take part in the mapping</p>	<p>Although the FS can’t easily stop people from harvesting illegally, the restrictions form one more safeguard for the plants.</p>

Current work: In 1999, Trinity Alps Botanicals started working with the Forest Service on a stewardship proposal to manage 1000 acres of Forest Service land for medicinal plants. This project is on hold due to lack of participants and labor. Existing plots focus on Yerba Santa, Horsetail, St John’s Wort, and how to grow medicinals. Current products include the standards and guidelines manual, tinctures, salves, and oils.

Case Study Discussion

How were harvesters involved in the various case studies?

- Paid consultants- Interviewees- source of information.
- Experimental design
- Hypothesis development
- Plot locations
- Treatments- harvesting the salal
- Interpretation of results
- As part of a small team
- Analysis of data
- Preparation of findings for website
- Presentations of findings
- Developing sustainability criterion, guidelines, training and checklist
- Monitoring plant populations
- Participate in various forums (Native American/Forest Managers)
- Value-added production and marketing

What were some of the challenges to involving harvesters?

- Funding
- Building trust
- Language barriers
- Negotiating between formal science requirements and informal science (the tension between what the harvesters felt should be studied vs. what professors wanted)

What were some of the things that made the programs successful?

- Involvement of harvesters—in all phases
- Passion and commitment of those involved to the issues
- Flexibility of funders, researchers- in terms of research design, timing, etc.
- Willingness/openness—to communicate, to build relationships, to be respectful of each other, to work through differences.

DIRECTIONS: Afternoon Small Group Work: Participatory Inventory and Monitoring**Resource Managers**

Directions: This morning we made some arguments for the inclusion of harvesters in inventory and monitoring efforts. Now we want to get your critical feedback and thoughts. Our goal this afternoon is to delve deeper into the nitty-gritty issues of inventory and monitoring design and to realistically grapple with constraints and barriers. Your task is to come up with some concrete recommendations and ideas for next steps.

Based on your experiences and knowledge, please discuss the questions below in detail. Your ideas, insights, and concerns generated from this exercise will shape our recommendations on harvester participation in inventory and monitoring NTFPs.

- ❑ Designate a recorder to write responses on flipcharts
 - ❑ Designate a presenter to share a concise summary of your discussion with the whole group.
 - ❑ Make sure that everyone in your group has a chance to share their thoughts on each question.
 - ❑ Once you have finished, hang flipcharts on wall.
-

1. How could you engage harvesters in I and/or M?
(What data do you need? How could harvesters help you?
What actions could you take to involve harvesters?)
2. What barriers do you foresee with involving harvesters in Inventory and/or Monitoring?
Brainstorm on how to overcome these barriers.
3. What would an ideal participatory I and M program look like? (What are the components, the process?)

RESULTS: Confederated Tribes of Warm Springs Perspective

John Arena, Talya Holladay, Raymond Moody, Tom Love

What follows is very specific to the Confederated Tribes of Warm Springs situation, which is characterized by informal ties among members of a relatively small community; NTFP harvesting by non-tribal members is rare, though there are occasional trespass issues (e.g., a Cambodian group harvesting beargrass a few years ago). Tribal authorities do not have to deal very much with non-tribal harvesting. An important distinction: members retain substantial autonomy in use of traditional resources for personal use (medicinals, basketry materials, etc.), and the tribe does not begin to attempt to regulate – it is self-regulating. The Tribal government is trying to get a handle on commercial NTFP harvesting (especially boughs and poles/posts). Harvest of these products requires a free permit, so has just launched a six-year project, focusing on sustainable harvest of boughs (incense cedar mostly, but also juniper, white pine, and noble fir (they've planted some noble fir; total only 120 acres).

1) How do we engage harvesters in I & M?

- Inventory is done by staff.
- Monitoring is done by tribal harvesters using weight tickets. The 670,000 acre reservation is divided into nine units; each of the nine commercial bough harvesters has one unit, and they allocated units fairly by themselves. Not one has yet reached even the initial limit of 50,000 lbs. for their unit.
- Commercial theft does not appear to be an issue of concern.

2) Barriers to involving harvesters?

- Very few barriers. Public meetings about the permit/sustainability project were well advertised (radio, letters to known individuals, newspaper, word of mouth) and attended.
- Although Warm Springs is a small community, it's still not clear who all is out there harvesting these NTFP resources, esp. non-members.
- Biggest barrier, perhaps, is tribal politics. By that participants meant the individual sense of entitlement to resources and areas tribal members feel, particularly for personal use – the tribal government has no authority (and should not have) in those matters. Sustainability of those resources not a problem, it would seem, but it appears there is no inventorying of those personal use (non commercial) NTFP resources.

3) Ideal participatory I & M program?

- The Confederated Tribes of Warm Springs program seems near ideal. Harvesters were involved from the beginning. Harvesters regulated themselves. Relatively good trust level with tribal staff, which does the inventorying.
- Time will tell; in six years (2009) the program will be evaluated.

Harvesters Perspectives:

Bill Knight, Pamela Martin?, Patrick Mooney, Andy Moore, Denise Smith, Eric Jones

1. How could harvesters be involved in inventory and monitoring (I & M).

- ❑ Harvesters need a tangible benefit such as access to the forest where the resource they are interested in is located. Stewardship contracts could be a mechanism for creating this access in exchange or in addition to doing I & M work. However, what harvesters get such a contract can be an issue in some places where there is competition for the same resource.
- ❑ Another example of a benefit in exchange for harvesters contributing to I & M work is Some harvesters could provide I & M for free as a part of their harvesting if they had reduced permit or lease fees.
- ❑ Another example of a benefit would be receiving payment for I & M work. Payment systems might vary from harvesters getting paid for data they collect while out NTFP harvesting or as an employee, contractor, or subcontractor on an existing vegetation survey contract.
- ❑ Free training on how to make extra money doing I & M could be a benefit to harvesters.

2. What barriers do you foresee in involving harvesters in I & M. Brainstorm on overcoming them.

- ❑ Many harvesters have already inventoried what species/products are in the their forests and can help management can learn what types of products they could manage for. Harvesters can share information such as inventories and locations but managers need to careful to recognize that not all information can be made public. For example, many mushroom pickers would be upset if their patch locations where made public.
- ❑ Harvesters have been burned management and science when they divulged information in the past. They have seen such information incorrectly assessed and this is a problem when inaccurate data is used against them such as in prohibiting access. Harvesters are concerned that the data gets passed around scientists and managers and distorted.
- ❑ It's important to recognize that there is a diversity of products and oftentimes people are knowledgeable about, and pursuing, different things in different places and that can be a factor in what they can contribute to I & M, at least without additional training.
- ❑ Harvesters don't always agree about what products are in certain areas and what is happening to them. - Forest ecosystems are always changing so management needs to be careful what the ground is locked up/designated for in terms of NTFPs. This shifting landscape can mean a shifting harvester type or changes in the type of knowledge harvesters have. Regional councils made up of harvesters could be a mechanism for them to share knowledge.
- ❑ Many harvesters would like to see small-scale sales and contracts increased that individuals and small businesses can take advantage of. The "local" people or regulars to a local area typically know the local ecology or ground the best. These are the types of harvesters you want involved in I & M. Big companies have big advantages with bidding systems so they could undermine individuals and small businesses.

- ❑ The FS/BLM agencies lack funding for NTFP management so they take the easy way out and restrict access or shut down the right for harvesters to harvest.
- ❑ Inconsistent management protocols across districts is problematic for harvesters and others trying to do the work on the ground.

3. What would an ideal I & M program look like?

- ❑ Harvesters have a vested interest in the well-being of the resource so they could be more accurate and/or dedicated to helping do surveys, monitoring, and ecological harvesting than other groups. Harvesters need to see offers from managers asking them to participate in programs. Harvesters who show initiative and a willingness to cooperate with management can be given opportunities to participate.
- ❑ Too often commercial harvesters are held accountable for problems in the NTFP arena and commercial buyers (large ones being more of a problem than small mom and pops) are not. Though harvesters would like to see management make commercial buyers more accountable they don't want to see the industry shift to large-money contracts and leases that favor big businesses. Inventorying and monitoring tied to big business contracts could ruin the little businesses.

Forest Service Perspectives (both managers & researchers):

Su Alexander, Dennis Beckner, Frank Duran, Rebecca McLain, Phil Janik, Joyce Berry, Linda Kruger

1. How could you engage harvesters in I and/or M? (What data do you need? How could harvesters help you? What actions could you take to involve harvesters?)

- ❑ Forest Service now has authority for “goods for services”, which is a new opportunity worth exploring.
- ❑ Research & establish protocols for I & M and work with harvesters to adapt methods
- ❑ Upfront collaboration between harvesters, managers, and researchers.
- ❑ Implication: w/o NEPA, no requirement for scoping – reduces collaboration. Need to reach out more.
- ❑ Agencies need to help publish information regarding local knowledge- develop extension-type development information.
- ❑ Find ways to engage all interested parties – e.g., amateur scientists (mycology clubs, etc.)
- ❑ Develop a structure, way to communicate how the agency or landowner works.
- ❑ FACA – find ways to communicate what FACA means and how it impacts how Forest Service operates.
- ❑ Research – conduct studies on how harvesters impact local economies.
- ❑ Pay them – from per diem to set rate to hourly to...

2. What barriers do you foresee with involving harvesters in Inventory and/or Monitoring? Brainstorm on how to overcome these barriers.

□ FACA

Several group members mentioned the Federal Advisory Committee Act (FACA) as a potential barrier to involving harvesters extensively in inventory and monitoring. Under FACA, the Forest Service and other federal agencies can't make decisions with input only from a small private group. Some of the group members thought that this might restrict their ability to include harvesters in research design and so forth, without also including other stakeholders.

One group participant pointed out that FACA applies to decision making for final results with management implications, such as a forest plan. It could be that FACA isn't really a barrier at all for inventory and monitoring with harvesters since I and M isn't considered decision-making. Other group participants suggested that if FACA was a barrier, it could be overcome by being as inclusive as possible in I and M work, and inviting the whole community, including residential and non-residential stakeholders to participate.

□ Ensuring scientific credibility

Participants mentioned that participatory I and M involving harvesters would likely face serious scrutiny from managers and scientists with respect to the credibility of the research design, methods used, and program implementation.

To overcome skepticism about the scientific credibility of studies in which harvesters play key roles, participants suggested that researchers need to be included from day one, and they need to make an effort to ensure that their techniques can be adapted to field use by those implementing the program.

□ Lack of money

The Forest Service currently has very limited funding available for studies, monitoring, and data collection. To address the lack of money for I and M, an effort needs to be made to include NTFPs as a line item separate from the FS timber programs. This would require a process of education and communication between ground level managers and mid-upper level management within the Forest Service.

At the same time, the NGOs need to make an effort to let their Congressional representatives know of the importance of NTFPs and the need for allocating more funding to the Forest Service aimed specifically at NTFP management.

□ Limited knowledge of NTFPs

Participants noted that the limited knowledge of the value of NTFPs (including commercial, personal use, subsistence, and cultural/traditional values) on the part of managers and the general public constitutes a barrier to harvesters being involved in I and M in that no thought is given to trying to get input from harvesters.

To address this issue, participants suggested that managers and researchers alike could emphasize the important and diverse values of NTFPs as a matter of course in public meetings and other forums.

❑ Trust

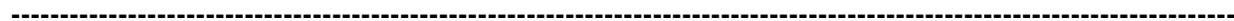
Lack of trust between harvesters and scientists, and between harvesters and managers constitutes a major barrier to involving harvesters in I and M. From the harvester standpoint, they may be reluctant to give up knowledge that might be revealed by managers to a broader public. They may also fear that I and M projects may lead to more regulation and higher permit fees.

From the scientists' and managers' standpoints, they may be concerned with whether harvesters will be able to carry out data gathering properly and in a manner that is sufficiently rigorous for scientific data collection.

Overcoming this barrier will take time and commitment by all parties involved, as well as the building in of safeguards to protect the interests of the various parties. Training, for example, would be an important aspect of getting harvesters up to speed for scientific data collection. Managers might need to enter into agreements with harvesters to not divulge the location of harvesting sites.

3. What would an ideal participatory I and M program look like? (What are the components, the process?)

- ❑ All players would be included at the table to start with.
- ❑ The program would be fully funded, and possibly eventually self-supporting, over the long-term. It would thus have long-term stability in terms of its financial support. An ideal program would also have a core structure that is stable over the long-term, so that when one person leaves the program, the whole program doesn't collapse.
- ❑ The program would need to provide information of use to managers and harvesters early on in the inventory and monitoring process. An I and M program would inevitably not produce certain results for months, and even years, but it is important that the program be time-responsive and provide useable information early on so that managers and harvesters don't lose interest.
- ❑ Everyone needs to be aware of the constraints that scientists and regulatory agencies face from the very beginning of the process. This would call for candid discussions early on amongst all of the stakeholders.
- ❑ FACA free mechanisms for carrying out the I and M program are available.
- ❑ Scientifically acceptable protocols and methods are used for data collection and analysis. Otherwise the management agencies' run the risk of having other stakeholders appeal any decisions based on the results obtained from the I and M process.
- ❑ Ongoing training for all parties to ensure that everyone stays up to date with the latest I and M methods, as well as methods for group communication and dissemination of results.



Non-Governmental Organization Perspectives:

Katie Bagby, Christy Getz, Sandra Jones, Erin Mirrett, Nanda Shewmangal, Emilio Williams, Sarah Workman

1. How to supporting harvester involvement in inventory and monitoring nontimber forest products

It was noted that some NGO assistance may take the form of advance work, or activities that precede the actual inventory or project monitoring activities.

- Make sure harvesters are always involved from the beginning – all steps.
- Get to know harvesters. Maintain and use contact lists (by group, of individuals) and help make linkages between groups.
- Seek to understand historical context of our own organization - the perception of organization by harvesters.
- Be clear about what is valued – why be involved? What's in it for harvesters?
- Develop standards with harvesters – help gather and provide information that exists, e.g. current regulations about harvesting.
- Help coordinate information gathering, flow, dialogue with stakeholders/participants.
- Work to understand leadership and decision making in different communities.
- Help secure financial support and fill role to help with networks.
- Mutual skill-building and technology transfer. Help technical skill building and learning from one another
- Trust-building and empowerment
- Don't come with an agenda – leave the agenda open to participation and evolution
- Help provide office support, space, phone etc. for logistics
- Promote their work (with harvester permission, involvement, etc.) and help advocate if necessary
- Help with I&M design/methods
- Help provide training to increase understanding and capacity
- Train groups on political advocacy and lobbying process
- Work on building long-term relationships and follow up
- Help open the door for dialogue among harvesters and land managers

- ❑ Keep track of baseline data of who harvesters (and harvester groups) are, what they need and want
- ❑ Help harvester groups find each other and promote dialogue between groups (commercial, traditional, Native American)
- ❑ Help bring together landowners and harvesters

2. Barriers and ways to overcome them

- ❑ Protect harvester privacy and appropriate use of knowledge, identity and confidentiality – create mechanisms to protect their knowledge. Change methods of operation to assure confidentiality
- ❑ Lack of control and access to resource – work to understand control of resource and access structure so NGO can understand impacts for harvester privacy and how to provide functional information and feedback between groups
- ❑ "Validity" of the research or methods questioned; often local knowledge not seen as valid. Voice acceptance of contributed knowledge.
- ❑ Refusal to accept anything other than own NGO frame of reference
- ❑ Language barrier (being careful to clarify terms and equate different words for same meaning)
- ❑ Cultural differences in approach, systems of norms and behaviors, and ways of learning (bureaucratic culture, local knowledge, experiential)
- ❑ Help bring "knowledge groups" (traditional, scientific, etc.) together to build mutual respect for knowledge pools and increase mutual understanding between groups
- ❑ Help harvesters document their knowledge
- ❑ Become fluent in bureaucracy "mainstream" to help harvesters navigate barriers and help bureaucracy change to become more accessible/flexible

3. Ideal Program components

- ❑ For the people, of the people, by the people
- ❑ Qualities of program are to be inclusive, respectful, and allow for alternatives (not just business as usual)
- ❑ Open to continuous improvement
- ❑ Everyone who wants a role has one
- ❑ Communication systems meet people where they are (snail mail, faxes, phone, in-person)
- ❑ Program can help provide transportation support to get people together, get harvesters where they want to go, facilitate meetings of stakeholder groups

- ❑ Transfer systems in place – technology and information flow along with communications that have meaning for all
- ❑ Allow for timing that matches harvester times – working outside the box (flexible with meeting times, accommodate harvest seasons)
- ❑ Freedom of expression appreciated so different learning, cultural and communication styles are accommodated
- ❑ Allows involvement of all stakeholders – harvesters, landowners, residents, scientists, environmental groups, advocacy groups
- ❑ Includes "opponents" in the discussion along with funders, other organizations and support groups so dissent can be voiced and heard by all
- ❑ Builds allies and alliances for shared authority and leadership to fully utilize strengths of participants
- ❑ Program is participatory rather than educationally didactic like university model of "we teach you."
- ❑ Builds willingness to work together

Researchers Perspective

Heidi Ballard, Leon Liegel, Patricia Muir, Dave Pilz, Melissa Poe, Morris Silber, Grace Wang

1. How could you support harvesters involvement in I and/or M? What could you offer to the effort? What could be your role?

- ❑ Researchers interest is “Who are the harvesters?” In order to answer that need to:
 - get into their community,
 - gain their trust,
 - understand their culture,
 - understand their issues,
 - “dig in”
- ❑ We can’t involve harvester unless we understand their situation and can build their trust. We need to be able to demonstrate that our interests are connected to theirs. This is the first step to help foster trust.
- ❑ What researchers could bring to the table to help support harvester involvement: **Skills & Resources**
 - interdisciplinary backgrounds
 - skills- both professional and interpersonal
 - scientific knowledge (education)
 - “big picture” context for research. Can provide input on the broader/regional/national scope and how this local issue fits in.
 - resources- such as funding and grant-writing skills
 - critical and analytical thinking

- rationale
 - incentives for participation. Cash?
 - sharing technology such as GPS, GIS, remote sensing.
 - could play a liaison role, connecting harvesters with managers.
- ❑ Need institutional support/foundation.

**2. What barriers do you foresee with involving harvesters in Inventory and/or Monitoring?
Brainstorm on how to overcome these barriers.**

Barriers

- ❑ Lack of research time/resources to do adequate and necessary follow-up. Monitoring requires that researchers and harvesters both be available up to several years after initial inventories and harvesting "experiments" are conducted, but oftentimes funds have run out or researchers (or harvesters) have moved on to other things, so that the relatively long term monitoring never happens.
- ❑ Lack of venues for disseminating findings. Need to distribute findings to wider audiences through various media, not just academic journals and conferences.
- ❑ Politicization of "science"- difference in values.
- ❑ Power relationships, ie. socioeconomic differences
- ❑ Language barriers
- ❑ Previous bad/negative experiences. We need to recognize that there may be "bad blood" and may require extra efforts before new collaborations can go forward.
- ❑ Time
- ❑ Money
- ❑ Personnel
- ❑ Validity/rigor- the issue of "quality". What we are referring to is that there may be mistrust of data collected by harvesters, unless it can be documented that there was training, oversight, and other components of a quality control/quality assurance plan in place.
- ❑ Regulations

Overcoming Barriers:

- ❑ Issue of follow-up: For overcoming this barrier, we could seek long term sources of financial support and work to get long term commitments to the project from both harvesters and researchers (even though this isn't very concrete!)
- ❑ Issue of validity: To overcome this barrier, have a well-documented process in place. Having a documented QA/QC plan in place will help to minimize this as a problem.
- ❑ Documentation. I think this referred to the quality control/quality assurance issue mentioned above -- it is important to document that good QA/QC procedures were used.
- ❑ The scientific method. I believe that this related to the validity/rigor barrier. We were suggesting that we could help to overcome that barrier by helping harvesters understand some of the basic components of a defensible scientific study -- issues of replication, controls, and so on. Similarly,
- ❑ Shared mutual goals! Via developing relationships
- ❑ Upfront relationship and trust building
- ❑ Overcoming stereotypes.

3. What would an ideal participatory I and M program look like? (What are the components, the process?)

- ❑ The ideal program would have the following components:

- ❑ Vested interest by all stakeholders at all levels (e.g. design, data collection, analysis, interpretation)
- ❑ Use of interdisciplinary teams
- ❑ Flexibility in funding sources (the funding sources are flexible?)
- ❑ Encourage participation, let it be known stakeholder involvement
- ❑ Proper acknowledgements
- ❑ Availability
- ❑ Make information available to all (to both lay person in general public and other academics), and use different strategies for reaching all groups- using both oral/visual, not just written materials.

EVALUATION RESULTS- PNW

Special One-Day Workshop: Harvester Involvement in Inventorying and Monitoring of Nontimber Forest Products

Thursday September 4th, 2003
World Forestry Center, Portland, OR

1. What did you like, or find useful, in today's workshop?

The Case Studies

- The case studies
- The showcase of several examples of this kind of work going on.
- Cases- really helpful examples of I & M.
- Information from the other workshops.

Diversity

- The multiple perspectives provided.
- Diversity of group brought variety of perspectives which was enlightening and thought/action provoking
- Diversity of opinions.
- The ability to see some of the players at the table!
- Diversity of opinions represented were good.
- There was a sincere commitment to inclusion - not only in the workshop format of the day - but in the quest toward collaborative and democratic NTFP management. This is exemplified by the range of invited participants, by the case studies highlighted, and the focus on Harvesters in the I and M process. The small group sessions worked very well as method to communicate the various priorities, concerns and commitments of the various stakeholders.

Facilitation

- Ease of registration and participation.
- Facilitation- especially regarding focusing and enforcing time frames was very good.
- Good format and process. Discussion in small groups in the afternoon. Can't wait to see the findings from the group (notes) and the final product.

Afternoon small group work

- The later part of the day- the small group discussions.
- Brainstorming in the afternoon.

Networking/ New Information

- Networking- good.
- The interaction with other workshop participants. Found out so me good ideas for participation.
- Some of the printed info enlightened my perspective
- Enjoyed all the new ideas of the renewable resources available. How they are trying to sustain these resources.
- Lots of information: good event.
- Meeting and participation was good; harvesters meeting harvesters and beginning to understand how to affect their lives—decisions by the Forest Service.

2. What needs improvement?

- More time for discussions.
- Hate to say it- more discussion time.
- Many of the groups overlapped in ideas and it would have been useful integrating them orally, but notes will be fine.
- Not necessarily improvement, but an opportunity after group sessions in afternoon to pair some of the diametric perspectives- e.g. researchers and harvesters to address question of authorship.
- Afternoon presentations assignment not clear—overall summary by each group vs. each group needing to go through Questions 1, 2, and 3 separately.
- I would like to see some more information on inventory and monitoring to get our program going.
- More Native American input (not that you didn't try)
- Not much. I think you accomplished your objectives. Maybe a little non “learner-style” for those in the group. Everyone will not speak up or add to the dialogue. Maybe a little more “intentional” interaction during the morning presentations. A copy of the major handouts (slides) from the power-point notes would have been helpful.
- Our small group facilitators style was more like leading a class discussion – it made it harder for group participants to say things their way or have their point “stand” without being reinterpreted or diluted or too quickly absorbed into another point.
- Nothing.
- See really none, maybe longer sessions to get all views and/or comments in.
- I was aware of an absence of migratory pickers, or rather, of Latino/a and SE Asian pickers. If harvesters at large have been traditionally marginalized from the management process, these communities of harvesters remain on the extreme margins. There are obvious logistical challenges to their inclusion, such as the fact that they are migratory, but more importantly, the likelihood that a (possibly) undocumented worker would collaborate with the USFS in I and M (in English, with the hanging fear of deportation) is slim ... Perhaps your ethnographic work has captured some of these voices and could be a tool for representation.

3. Were your expectations for the workshop met? If not, why not, and how could we do better?

- Yes, I learned quite a lot about I & M in relationship to harvesters (salal, mushrooms, medicinal) from the case studies.
- Yes, really well done.
- Exceeded. The format was excellent. I learned a lot about people's willingness to engage reflexively in the management process. While there clearly are some challenges to democratic participation in NTFP management and disparate goals of various stakeholders, the group of individuals at this workshop on the whole appeared invested in working collaboratively.
- Yes. I would have liked to have an activity that helps networking across groups (scientists, managers, harvesters, tribes, NGOs)
- Yep, nicely done.
- Yes.
- Yes: information exchange, meet new people, revisit old contacts, have fun!
- Yes, to a degree. I was hoping for more on I & M as mentioned in #2.
- Yes, I came away with more knowledge and ideas of nontimber resources available.
- Yes, thank you. Good job Katie and Eric.
- Yes, great (?) opportunity for me. Thanks for having me. I'm learning more about the issues and they help me tremendously in the work that I do across the country.
- Good facilitator also- she was working with a tough group and was able to keep us on task. Thanks again. Sometimes you just got to shut them up.
- Sort of; not workshops fault just different picture when I left my home for this workshop.

4. Other Comments? Criticisms? Opinions? Insights? (Feel free to use more paper)

Food/Logistics

- ❑ Good food, nice place/location
- ❑ Thank you for the great food! Lovely space! Facilitation was very good. Thank you!
- ❑ Good food/snacks with more recognition of local and organic products.
- ❑ For environmental folks, maybe its not a value- I did finally see cans pulled aside for potential recycling but no compost bins, etc. Often times, more fresh water is better than sodas.

Follow-up

- ❑ Make sure to give everybody the notes from the workshop—lots of valuable points and suggestions- great idea. Perhaps create a bulletin board for workshop participants on your website to keep the conservation going.
- ❑ Would like to see maybe an annual meeting of this or some kind of networking for everyone.
- ❑ Thanks for a stimulating day! At times, especially early on, I found myself thinking "This is kind of a waste of time, since so much (most, in the case of some NTFPs, like moss) harvesting takes place illegally and those folks will never be brought to the table anyway....." But, as the day went on I became more excited about the prospects raised by trying to really give harvesters "ownership," in which case they WOULD serve as the eyes and ears that the land management agencies can't afford to hire for patrolling lands and so on. It was exciting. Wouldn't it be nice if there were funds such that workshops like this could actually lead to on-the-ground demonstration projects involving harvesters with I & M? Then the suggestion that someone made about forcing folks to stay cloistered in a room until they had come up with a study plan would really make sense, in leading to a concrete action.
- ❑ That's all for now, but great job and I look forward to having the final document to refer to!

Participants

- ❑ Diverse group of participants (FS/NGO/Researcher/Harvesters/Tribe)
- ❑ As a sovereign entity, we seemed to be out of place!
- ❑ Firm commitment from a PNW politician aid or staffer to be a participant.

Facilitation

- ❑ Like mentioned above, integrating the brainstorming results would be useful.
- ❑ Explanation of like groups vs. mixed groups for afternoon discussion- why like groups? Learn more via diverse groups?
- ❑ Interesting way of doing the introductions: reverse bios OK but maybe need more than 2 minutes to collect the information.
- ❑ Needed a "public plug" to point out the natural products tables—from other regions of the USA- very diverse table.
- ❑ Explain that the study was limited to the continental USA with a strict 18-month limit.
- ❑ Handouts of power-point and/or presentations would have been nice to have in note format for all participants.
- ❑ It was presented real well. The exercise and presentations were done excellently.
- ❑ Overall: a good show! A great job!
- ❑ Great job! I think you are all doing fascinating work and it was a real pleasure to meet you. I look forward to more.
- ❑ Wanted to thank you for giving me the opportunity to attend the workshop. You guys did a fantastic job. I really enjoyed myself. Hope I wasn't too much trouble!
- ❑ I do have one suggestion for a future workshop. These guys need to get together one on one. Group them as you would any study group. Assign a task to each group. The task would be to

design a study/monitoring on a mushroom, floral, etc. Lock each group in a room and don't let them out till it's done, or medical/physiological assistance is needed!

- It was a pleasure to meet with you and attend your wonderfully organized workshop. Everything was great: the organizers, the setup, the participants, the speakers, the presentations, and the group-discussion.

Post-Workshop Comments- on Review Process

- Wow -- you folks are fast! I gave the notes a quick read, and believe that you captured the discussions very well.

IFCAE responses: Thanks for your feedback. We really appreciate your time and input. To respond to some requests for printed handouts—we did not provide handouts of power-points due to our efforts to reduce our consumption of paper, and we will be making these available on-line instead. We do recycle the cans and we do compost at our home office, we simply didn't think to grab the bucket. And we agree—we wish we had had more time for a final discussion and hope we will all continue this dialogue. And yes, we didn't expect many undocumented workers to show up, but that is exactly why we spent so much time in the field talking with harvesters- of all kinds. Thanks again to everyone. Please stay in touch.

National Retreat
Harvester Involvement in Inventorying and Monitoring of Nontimber Forest Products
September 9-11th, 2003
Silver Falls Conference Center, OR.
Organized by the Institute for Culture and Ecology (IFCAE)

Agenda

Participants

- IFCAE: Eric Jones, Rebecca McLain, Kathryn Lynch (facilitator)
- Component 4 Regional Liaisons: Maureen DeCoursey (West), Marla Emery (NE), Sarah Workman (SE), Tom Love (PNW), and Component 1 Advisor: Dave Pilz

Workshop Objectives:

1. Draw from participant’s expertise, ethnographic fieldwork, and regional workshop results to discuss barriers and strategies relating to harvesters involvement in NTFP inventory and monitoring.
2. Begin outlining recommendations for monitoring systems to assess NTFP sustainability.

Workshop Format:

We envision this retreat as an opportunity for the group explore the various political, economic, cultural and ecological considerations that stakeholder groups (policy makers, land managers, harvesters and buyers) would need to address when designing an I & M program that involves harvesters. The questions we sent out for review represent key data gaps that have been identified in the past three workshops, and we will use these questions to guide our discussions. We recognize that there are no simple answers, or right answers. You do not need prior experience in inventory and monitoring in order to be a valuable contributing member to the discussion. The only prerequisite is that you come ready to draw on your past experiences to illuminate the discussions and contribute toward the development of final recommendations. These open and free-flowing discussions will be a space for us to brainstorm, vision, and be creative based on the diversity of previous experiences we all bring to the table—with the goal of building toward sound recommendations on next steps for I & M pilots.

Summary of the Overall Project Deliverables Contributed to by these National Retreat Discussions

Deliverable 2: “A review of NTFP monitoring protocols”

Goal: provide a tool to managers to help with establishing workable monitoring protocols.

Audience: This document targets land managers and scientists with an interest in developing and implementing workable and cost-effective monitoring systems for assessing the impacts of NTFP management on biodiversity.

Length: 20-30 page document

Content: Review of current monitoring protocols, Recommendations for a monitoring program based on data collected during the fieldwork and regional workshops, Will compare the systems used or proposed in each region, Will include prototype monitoring protocols developed during regional workshops

Deliverable 3: “Proceedings from a synthesis workshop”

Audience: land managers, scientists, extension agents, environmental and conservation-oriented NGOs and other institutions interested in supporting sustainable NTFP management.

Length: 100-150 page hard copy version, and posted on website

Content: Proceedings from the national synthesis; Summary of the findings and recommendations from the four regional workshops; Bring together harvest and local management knowledge and synthesize it in a way that managers can use.

AGENDA OVERVIEW

Time	Mon. 9/8	Tues. 9/9	Wed. 9/10	Thurs. 9/11	Friday 9/12
7:30am			Breakfast	Breakfast	Participants Leave
8:00					
8:30 am			Think Tank: Design Issues Labor Issues	Activity: Developing Final Recommendations	
9:00 am		Leave for Silver Falls			
10:00 am					
11:00 am		Introductions & Overview			
12:00 pm		Lunch: NCSSF Overview	Lunch	Lunch	
1:00 pm		Think Tank: Design Issues	Think Tank: Labor Issues	- Final Discussion	
2:00 pm				- Depart Mtg. Hall	
3:00 pm				- Hike the Falls	
4:00 pm	Participants Arrive			-Return to PDX	
5:00 pm					
5:30-6:30pm	Dinner	Dinner	Dinner		
7:00 pm		Short hike	Short hike	Dinner	
8:00 pm		NCSSF Slideshow	Open		
9:00 pm					
10:00 pm					

Tuesday September 9th, 2003

- 8:00 **Group Breakfast**
- 9:00 **Leave from PDX for Silver Falls**
 EJ, KT, RM, Marla, Sarah, Maureen. We will pick up Tom Love on the way. Dave will meet us there.
- 11:00 **Arrival to Upper Smith Meeting Hall: Welcome and Introductions**
 Go over agenda, objectives, logistics
- 12:00- 1:00pm **Lunch – Overview of NCSSF Project to Date**
 Each participant gets a chance to share their involvement, perspectives, comments on the project and issues of I & M of NTFPs in their region specifically.
- 1:00-2:30 **Think Tank: Design Issues**
- ❑ Who initiates I & M?
 - ❑ Can harvesters conduct I & M while harvesting, or are they separate activities?
 - ❑ How much and how often does data collection need to happen?
 - ❑ Where does informal monitoring, local knowledge fit into formal I & M?
- 2:30-2:45 **Afternoon Break**
- 2:45-5:50 **Think Tank (continued)**
- ❑ Potential role of permits and licenses in collecting various types of data? Reliability? Quality?
 - ❑ How do we ensure data validity?
 - ❑ What kind of training would be needed and how could it be provided and paid for?
- 5:30-6:30 **Dinner**
- 6:30-7:30 Short after-dinner walk/ Free time
- 7:30-8:30 NCSSF Slideshow

Wednesday September 10th, 2003

- 7:30-8:30 am **Breakfast**
- 8:30- 9:45 **Think Tank: Design Issues Continued**
- ❑ What possibilities exist for combing research projects for more efficient data collection?
 - ❑ Opportunities for coupling active management with I & M?
- 9:45- 10:00 **Morning Break**
- 10:00- 12:00 **Think Tank: Design Issues Continued**
- ❑ How can I & M measure the impacts of forest management on NTFPs? (e.g. spraying, logging, gating, fire, etc.)
 - ❑ How will I & M get done on private lands? What proprietary data issues exist?
- 12:00- 1:00pm **Lunch**
- 1:00-2:30 **Think Tank: Labor Issues**
- ❑ What are the criteria for selecting participants?
 - ❑ How do we identify plots and preserve plot integrity in areas with existing local use patterns without creating local resistance?
 - ❑ How do current labor structures influence the development of I & M? What would be the best labor structure to promote I & M? ?
- 2:30-2:45 **Afternoon Break**
- 2:45- 5:30 **Think Tank: Labor & Miscellaneous Issues**
- ❑ What incentives are needed to attract stakeholder participation?
 - ❑ Where will funding for I & M come from?
- 5:30-6:30 **Dinner**
- 6:30- Evening stroll to South Falls
- 8:00 Free time. We collected various videos on our tour that we could watch, or not.

Thursday September 11th, 2003

7:30-8:30 am **Breakfast**

8:30- 12:00 **Activity: Developing Final Recommendations**

- ❑ Send out stakeholder sheets to everyone prior to the meeting, asking everyone to think about the questions for the different stakeholder groups.
- ❑ At the retreat, we will spend approximately half an hour per stakeholder group, discussing our comments.
- ❑ We will rotate facilitators, so that each participant gets to lead the discussion for one of the stakeholder groups.
- ❑ If it turns out that we are having rich discussions, we can decide to spend more time and skip some of the stakeholder groups. We must at least cover the first 4.

8:30-9:00	Stakeholder 1: Harvesters
9:00-9:30	Stakeholder 2: Buyers
9:30-10:00	Stakeholder 3: Land Managers
10:00-10:30	Stakeholder 4: Policy Makers
10:30-11:00	Stakeholder 5: Scientists/Researchers
11:00-11:30	Stakeholder 6: Extension Agents
11:30-12:00	Stakeholder 7: Non-governmental Organizations

12:00- 1:00 pm **Lunch**

1:00- 2:00 pm **Final Wrap Up**

- ❑ Review objectives and agenda, and main findings from the week.
- ❑ Go back to expectations and review.
- ❑ Review process for results.
- ❑ Thanks to team.
- ❑ Group Photo.
- ❑ Evaluation.
- ❑ Pack up and clear out of meeting hall and cabins

2:00 pm **Trail of Ten Falls Hike**

6:00 ish **Return to Portland**

8:00 ish **Celebration Dinner in Portland, post-workshop reception
at Katie and Eric's**

Activity: Developing Recommendations regarding I & M

Stakeholder Group: Harvesters

Recommendations: (What are the main arguments/points/recommendations we want to get across to this group?)

Considerations: (Brief discussions of the main economic, political, cultural, ecological considerations they will face when attempting to go forward with recommendations)

Specific Steps: (Ways to address considerations and suggestions on what needs to be done to implement the recommendations made above)

Possible allies/groups to network with:

Activity: Developing Recommendations regarding I & M

Stakeholder Group: Buyers/Brokers/Industry

Recommendations: (What are the main arguments/points/recommendations we want to get across to this group?)

Considerations: (Brief discussions of the main economic, political, cultural, ecological considerations they will face when attempting to go forward with recommendations)

Specific Steps: (Ways to address considerations and suggestions on what needs to be done to implement the recommendations made above)

Possible allies/groups to network with:

Activity: Developing Recommendations regarding I & M

Stakeholder Group: Land Managers

Recommendations: (What are the main arguments/points/recommendations we want to get across to this group?)

Considerations: (Brief discussions of the main economic, political, cultural, ecological considerations they will face when attempting to go forward with recommendations)

Specific Steps: (Ways to address considerations and suggestions on what needs to be done to implement the recommendations made above)

Possible allies/groups to network with:

Activity: Developing Recommendations regarding I & M

Stakeholder Group: Policy Makers

Recommendations: (What are the main arguments/points/recommendations we want to get across to this group?)

Considerations: (Brief discussions of the main economic, political, cultural, ecological considerations they will face when attempting to go forward with recommendations)

Specific Steps: (Ways to address considerations and suggestions on what needs to be done to implement the recommendations made above)

Possible allies/groups to network with:

Activity: Developing Recommendations regarding I & M

Stakeholder Group: Scientists/Researchers

Recommendations: (What are the main arguments/points/recommendations we want to get across to this group?)

Considerations: (Brief discussions of the main economic, political, cultural, ecological considerations they will face when attempting to go forward with recommendations)

Specific Steps: (Ways to address considerations and suggestions on what needs to be done to implement the recommendations made above)

Possible allies/groups to network with:

Activity: Developing Recommendations regarding I & M

Stakeholder Group: Extension Agents/Consultants

Recommendations: (What are the main arguments/points/recommendations we want to get across to this group?)

Considerations: (Brief discussions of the main economic, political, cultural, ecological considerations they will face when attempting to go forward with recommendations)

Specific Steps: (Ways to address considerations and suggestions on what needs to be done to implement the recommendations made above)

Possible allies/groups to network with:

Activity: Developing Recommendations regarding I & M

Stakeholder Group: Non-governmental Organizations

Recommendations: (What are the main arguments/points/recommendations we want to get across to this group?)

Considerations: (Brief discussions of the main economic, political, cultural, ecological considerations they will face when attempting to go forward with recommendations)

Specific Steps: (Ways to address considerations and suggestions on what needs to be done to implement the recommendations made above)

Possible allies/groups to network with:

Background Materials

Inventory and Monitoring chapter guidelines provided by Kerns, et al. 2002.

- a. What form could data collection take (observation, test plots, herbarium vouchers, etc.)?
- b. Could several products or species be inventoried and monitored at once?
- c. How, when, where, how often and what data be collected?
- d. Will data collectors require training and who will provide it?
- e. How is data validity provided?
- f. What would be the optimal scale of the study area (e.g. country, state, watershed, bioregion)?
- g. How do temporal factors (e.g. seasonal variations) affect the data being collected?
- h. Will commercial product yields be estimated? How will this be done?
- i. How will inventory and monitoring affect current users/harvesters in your research area?
- j. What is an acceptable balance between accuracy and overall cost of the project?
- k. How will the data be archived? What institutional arrangements exist for continuity?
- l. How will the project be funded?
- m. Other considerations?

Acronyms

AHPA	American Herbal Products Association
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
DCNR	Department of Conservation and Natural Resources
FACA	Federal Advisory Committee Act
FIA	Forest Inventory and Analysis
I & M	Inventory and Monitoring
IFCAE	Institute for Culture and Ecology
K-V	Knutesen-Vandenburg
MPWG	Medicinal Plant Working Group
NCSSF	National Commission on Science for Sustainable Forestry
NEPA	National Environmental Policy Act
NEWFS	New England Wildflower Society.
NGO	Non-governmental Organization
NTFP	Nontimber Forest Product
NRHA	Northwest Research and Harvester Association
PCV	Plant Conservation Volunteer Program
PNDI	Pennsylvania Natural Diversity Inventory
PNW	Pacific Northwest
SFP	Special Forest Product, aka Nontimber Forest Product
T & E	Threatened and Endangered Species
TAB	Trinity Alps Botanicals
TIMO	Timber Management Organizations
USFS	United States Forest Service
US FWS	United States Fish and Wildlife Service
WPC	Western Pennsylvania Conservancy

Appendix 1:
REGISTRATION FORM

Harvester Involvement In Inventorying And Monitoring Of Nontimber Forest Products

October 17th, 2002
USDA Forest Service Region 2 Headquarters, Lakewood, CO

Name: _____
Job Title: _____
Affiliation: _____
Address: _____
City: _____ State: _____ Zip _____
Phone: _____ Fax: _____
Email: _____

Please take the time to answer the following questions. Your thoughtful input will help us develop a better workshop.

1. Experience with Nontimber Forest Products: Please describe your prior experiences with NTFPs- including any work-related and/or personal experiences.

2. Expectations: (ie. Why did you sign up for this workshop? What do you hope to get out of this workshop?)

3. Collaborations: Do you know of any collaborative relationships between harvesters and forest scientists or managers in your area? If so, please describe.

4. Your Background:

a. What strengths, experiences, skills or knowledge do you have that would benefit this workshop?

b. Educational training/degrees:

c. Years involved with NTFPs:

Appendix 2:

SAMPLE OF PRE-REGISTRATION RESULTS

1. Experience with Nontimber Forest Products: Please describe your prior experiences with NTFPs- including any work-related and/or personal experiences.

Personal harvesting experience

- ❑ Cascara peeling, black berry/blue berry picking, mushroom (yellow chanterelle harvesting, native seedling harvest and transplanting, forest gamebirds, agroforestry plantings (paulownia, timber bamboo, saskatoon, sunchoke, comfrey, josta berry, beauty berry, muscadine and other grape varieties, raspberry, coast redwood, and habitat plantings; subterranean clover, Austrian winter pea, bird's foot trefoil, millet, vetch,) and aquaculture (bullfrogs, catfish,).
- ❑ I have been harvesting mushrooms approx. 5 yrs, Huckleberries 4yrs, Greenery 2yrs.
- ❑ I harvest berries, mushrooms, floral greens, boughs, craft materials, transplants, seeds, and moss for personal use and for gifts. I have been involved in beekeeping most of my life. I have harvested mushrooms for commercial sale, and florals and moss to use in floral designs for weddings and funerals. My work-related research in nontimber products has focused on the value, removal, consumption, policies, social meaning, labor structure, inventory and supply of nontimber products used both by personal use and by commercial use harvesters.
- ❑ I have worked in native nurseries for four years, and every nursery I worked in had permits to dig native plants on public lands. I have wild-harvested wetland and forest plants for nurseries and restoration projects. I have also wild-crafted herbs for medicine and wild food for personal consumption.
- ❑ Since 1985 I have harvested/handle/purchased edible forest products & floral greens. I attend local/regional/national conferences on NTFPs. I co-founded the Olympic Special Forest Products Task Force in WA State. I attended Community Forestry Research Fellowship in NY/AR as a community representative. I continue to harvest forest edibles and advocate individual rights to access public & private industrial lands to harvest in sustainable ways. Through the AFWH I've sponsored harvester trainings.
- ❑ My professional experience with NTFPs is limited, however, personally I harvest edible mushrooms.
- ❑ Personal -- have harvested morels in Idaho a few times for personal use. Work related -- Through the PWCFC, I coordinate the Crescent Lake Mushroom Monitoring Project.
- ❑ I am a biologist by training. I also have collected nontimber forest products for personal use.
- ❑ Besides consumption and personal/recreational harvesting of berries, hips, some mushrooms, etc. my experience is limited to academic research of resource politics, tenure, and decision-making.
- ❑ I have been harvesting Christmas trees/Christmas greens and other special forest products from Federal ground since 1981. From private grounds since 1965.
- ❑ Personal experiences = gathering NTFPs on public lands, ie berries, mushrooms, Christmas trees, etc. Work-related experiences = I am currently engaged in socioeconomic monitoring associated with the Northwest Forest Plan. One of the monitoring questions I must address = "are predictable and sustainable supplies of nontimber forest products available and being produced on federal forest lands within the Northwest Forest Plan area?" I've been gathering and analyzing Forest Service and BLM data on NTFPs (# of permits and contracts issued, dollar value of permits and contracts issued, amount of product sold, allowable harvest) for all federal forests in the Northwest Forest Plan area, annually, since 1990. However these indicators are unsatisfactory in and of themselves for monitoring the harvest and availability of NTFPs on Forest Service and BLM lands, and for answering the monitoring question I must address.

Research experience

- ❑ Matsutake studies Chemult, 1994-1997, Diamond Lake, 1994-2002, Boswell, 1990-2002.
- ❑ My Masters degree is in natural resources management at North Carolina State University's forestry department. My focus was sustainable agriculture, which entailed agroforestry, permaculture and organic farming. I have worked on several farms and spent much time learning about NTFPs around the globe with focus on temperate systems.
- ❑ Starting initial exploratory research on the "state of NTFPs" in California.
- ❑ Primarily information collection and research re: Spanish moss, pine straw and indigo in the South Carolina low country as part of a community-based forestry project focusing on traditional communities.
- ❑ Scientist published on the topic of wild forest mushrooms productivity and managing forests for sustainable mushroom harvests.
- ❑ Worked for the past 20+ years in management of SFP's both on westside and eastside. Managed and designed one of the first matsutake mushroom studies on west coast and in FS. Currently working with the design of NTFP appraisal/cost/product analysis for Region 10 (Alaska) and R2 (Colorado, Eastern Wyoming, South Dakota, Kansas and Nebraska). Completed similar project for R6 (Oregon and Washington). Work as an internal contractor/consultant for the FS and other agencies. Currently co-chair for the Pacific Northwest Special Forest Products Council. Council operates as an SFP educational forum for interested parties.

- ❑ Development of an "in-the-field" express Technology for Quality Control and Standardization (QCS) of medicinal and dietary botanicals (NTFP).
- ❑ I have had about 10 years of NTFP research experience, starting with a dissertation on the topic of huckleberry gathering in the Mount Hood National Forest. Since then, I have continued looking at NTFPs within the context of community-based forestry. Most recently, I am currently involved in ethnographic research in the Redwood National Park, which covers Indian gathering of NTFPs
- ❑ A---Nontimber Forest Products Management in the Pacific Northwest: a white paper written for the Bureau of Land Management, 1992-1993.
- B---Pacific yew conservation biology, 1992-1993 (part of a Bristol Myers Squibb \$250K grant to the Pacific Northwest Research Station): Bailey, JD; Liegel, LH. 1997. Response of Pacific yew (*Taxus brevifolia*) to partial removal of the overstory. *Western J. Applied Forestry* 12(2):41-43; Bailey, JD; Liegel, LH. 1998. Pacific yew (*Taxus brevifolia* Nutt.) Growth and Site Factors in Western Oregon. *Northwest Science* 72(4): 283-292.
- C---Biological, socio-economic, and managerial concerns of harvesting edible mushrooms on the Olympic Peninsula and in the Southern Appalachians, 1993-1997: a \$51K grant from US-Man and the Biosphere Program (with T. Love, K. Cromack, Jr., R. Molina, and D. Pilz)--6 articles summarized in *AMBIO*, 1998, Special Report No. 9.
- D--- The MAB Mushroom Study as a teaching case example of interdisciplinary/sustainable forestry research: an \$8K grant from the Oregon State Univ. Sustainable Forestry Partnership, 1996 (with R. McLain and E. Jones).
- ❑ I've been involved in projects focusing on the commercial harvest of epiphytic moss from forests in Western Oregon. The primary questions I've worked on relate to the size of the inventory (that is, how much moss is out there and potentially harvestable) and to the rate at which it reaccumulates after harvest. Both relate to an underlying interest in the sustainability of harvest under current practices (whether those are working under constraints imposed by permits or not). I'm also currently involved in a project whose goal is estimating how much moss is actually being sold from the PNW and the Appalachian regions, how that partitions between domestic and international sales, and what are the the primary species being harvested.

Management experience

- ❑ Two years with Oregon State Parks NTFP permit system.
- ❑ I am currently the program manager for the special forest products for the US Forest Service in Oregon and Washington. I have also served this role for the Siuslaw National Forest. I'm also a recreational harvester of morel mushrooms, huckleberries and personal xmas tree each year.

Advocacy/NGO experience

- ❑ Have worked for the past two years supporting NTFP harvesters by following up on concerns they have raised and providing information. She has been the lead staff person on our project to get harvester input on the Section 339 law and passing those concerns on to legislators and agency staff. She has spent a some time harvesting mushrooms.
- ❑ I work with all parties interested in National Forest management. On the Gifford Pinchot NF, this includes many harvesters. Harvesters and local residents are very concerned with the sustainability of harvesting and there is also concern about good harvesting practices. In addition, I am beginning to work with folks involved in the community forestry movement and have become more familiar with harvesters' concerns and needs through those meetings and conversations.

No experience

- ❑ None (3 people): "Haven't had any prior experience but will be doing these in my future position."

2. Expectations: (ie. Why did you sign up for this workshop? What do you hope to get out of this workshop?)

Focus on Harvester Involvement in Inventory and Monitoring

- ❑ I hope to come to a clearer understanding about the opportunities for harvesters to participate actively in monitoring the forest products that sustain their livelihoods. I will also be looking for opportunities for the Alliance to support monitoring projects and link harvesters to other organizations doing the same.
- ❑ I am especially interested in civic science and participatory monitoring. I am interested in designing some participatory monitoring protocols for use in Alaska.
- ❑ I believe the need for inventory and a monitoring system in way past due. Our area has a program that allows the public to propose work or programs that will better our forest. The deadline is April 1st. I realize this workshop is past the deadline, but would like to acquire any information that would school me to achieve my goals.

- ❑ I will be there to learn. I am always interested in finding out what people are doing at all levels, how policy affects what happens in the woods, and how people are thinking about doing different things (like inventory, which I take it is the focus of this workshop).
- ❑ This is an important issue that hasn't received much attention. I am concerned about the effects of harvesting on the various ecosystems. I'm not sure how to start gathering a baseline of information or what exactly can be done.
- ❑ The Crescent Lake project has focused more on monitoring the social dimensions of the harvest, with ecological dimensions in broad brush strokes. I'm interested in learning about and networking with others on ways to facilitate more harvester monitoring on the resource itself (particularly production in response to various harvesting techniques). I hope to walk away with some new relationships with FS scientists and others, and some practical ideas on how to design a collaborative study.
- ❑ I am interested in how harvesters frame issues and concerns that are important to them. I will be paying attention to topics related to resource tenure, decision-making and participation of private harvesters. Also, I am interested in the experiences harvesters have with each other, other organizations, scientists, and public policies.
- ❑ I signed up because I wanted to learn more about NTFP; how it operates in the PNW; and who the players are. I also hope to get a better understanding of what NTFP is, its functions and some of the concerns the workers have.
- ❑ Because of the limitations I've run into in trying to inventory and monitor NTFPs on public forest lands described in #1 above, I'm interested in learning about other approaches to monitoring NTFPs that are being developed and tried. I hope to get new ideas about how to monitor NTFPs on federal forests from the workshop, and to learn about existing data sources that I may be unaware of.

Networking/Sharing Experiences and Ideas regarding various aspects of NTFPs

- ❑ Network with others in region, learn what is working and not working for them, share my experiences,
- ❑ Share and learn ideas for managing all aspects of NTFPs.
- ❑ To maintain familiarity with current events and studies.
- ❑ Create interest in establishing a PNW NTFP broker position... Somebody who could link producers to harvesters to marketers, to end users. There is a veritable smorgasbord of forest products currently going to waste in the woods; tons of blackberries (Trailing, Evergreen, and Himalayan) that could be used for preserves, wines, cordials, and pies; mushrooms, truffles, elderberry, salmon berry, black caps, bull frogs (frog legs), game birds, etc.
- ❑ Consider cooperative operations to consolidate resources, improve markets, and foster NTFP promotion/ public awareness.
- ❑ I am both personally and professionally interested in sustainable land management practices, including agriculture and forestry....if there is a difference! :)
- ❑ To develop better understanding of the role NTFP's play in the timber community and agencies responsibility in management.
- ❑ An opportunity to learn from another locale's practices and share ideas and experiences re: future activities.
- ❑ I hope to network with folks at the meeting, find out concerns from our public sort of get the pulse of what is happening and always interested to learn new things related to SFPs.
- ❑ Always interested in learning about current issues related to SFP or NTFP. Hope to update my information on educational needs related to forest products.
- ❑ I hope to meet other people who are active and interested in native plants and non-timber forest resources. I hope to learn more about wild-harvest practices, politics, policies, permits and who is doing what!
- ❑ To personally deliver the new "state of art" technology for QCS of medicinal and dietary botanicals (NTFP) to the harvesters, pickers, growers, and brokers in order to add value to the medicinal and dietary products and to improve the management and sustainability of the NTFP industry and private businesses.
- ❑ I am interested in NTFPs primarily from an agroforestry perspective. I would like to know more about how to monitor populations of NTFPs so a private landowner would be able to sustainably harvest these products while managing their timber resources.
- ❑ I signed up to connect with and learn from other harvesters how to manage NTFPs and include harvesters in the decision-making processes that effect our work and livelihoods. I hope to gain knowledge through networking with others and empowering others to participate in the decision making process.
- ❑ Hope to make some connections, and simply meet people interested in NTFPs.
- ❑ Learn the most recent status of nontimber forest products activities in the Pacific Northwest; get reacquainted with colleagues, harvesters, and others not seen in several years; observe workshop logistics for NCSSF-A3 grant.
- ❑ I'd like to learn what others know about moss harvesting, and, in particular, I'm interested in learning who the big buyers and distributors are so that I can ask them questions. (We sent surveys to many land managers -- state, tribal, federal, and private -- and to botanists and had a great response rate from them, but surveys sent to buyers were largely ignored...not surprisingly, I guess, but I need to make contacts and try again, perhaps with a new approach...)

- The Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians expect to have a significant acreage of forest restored to the Tribes, and we will be using nontimber forest products for cultural and economic purposes.
- Since accepting position with special projects I'm hoping to get any new ideas and more knowledge and any ties with people that are dealing with same area.
- None

3. Collaborations: Do you know of any collaborative relationships of any kind between harvesters and forest scientists or managers in your area? If so, please describe.

- I have worked 9 years with Silviculturist at Tokette Ranger District on matsutake studies. Also, collaborated with scientist Mike Amaranthus, Dave Pilz, and Dan Luoma on matsutake. (Mentioned or acknowledged in most US matsutake Pubs.)
- I have worked with many of the SFP officers from Oregon, California and Washington.
- I'm not aware of any other than large timber companies allowing Oregon grape and salal pickers to harvest their lands with a fee permit.
- The Tillamook resource center comes to mind, but that is it at this time.
- We have heard about the Northwest Research & Harvesters Organization in western Washington that is apparently involving harvesters in research, but we have not learned the specifics of their projects. We supported a harvester's interaction with scientists studying the impacts of ground disturbance on Matsutake propagation, but it wasn't exactly a collaboration. We also supported harvester collaboration with Search & Rescue in Curry County, Oregon to get their informational brochure translated into Spanish and Khmer. Harvesters also met with Search & Rescue staff, Forest Service personnel and sheriff and police representatives to explain perspectives and activities of harvesters.
- We are developing relationships between pine straw harvesters/landscapers, extension agents and forest service folks, including scientists.
- We do several through studies and monitoring of moss, mushrooms, greenery.
- I know of only one true collaborative relationship, and that involves a researcher named Jeri Peck (private researcher now; was affiliated with Oregon State University in the past) and Frank Duran (with the USFS in Portland, as I recall) who are studying moss harvesting on the Hebo District (Siuslaw National Forest) and have a cooperating harvester or two involved with their work. You'd have to ask Frank or Jeri for details. (I'd give you email addresses, but am writing from home and don't have them here -- maybe you know Frank though -- special forest products coordinator, I believe -- for the Siuslaw? For this Region?)
- The only collaboration I know of is between schools doing restoration projects and developers that let the students and teachers come and salvage plants before demolition of natural areas begins.
- The Crescent Lake RD and the Chemult RD collaborate with us on the mushroom monitoring project. I haven't yet met Rick Abbott, Jerry Smith, or others who have been involved in with studies with harvesters in the past.
- Only what Dave Pilz has shared with me in the past 12-18 months.
- Andy Moore and Rick (? can't think of his last name) are working together on matsi yields and silviculture on the Diamond Lake district, I assume you know about them. Rebecca does. Rick also has a couple of people from Scotland there working on silvicultural issues. Don't know if it includes NTFPs. Rachel Miller and Steve Buskie.
- No, not in my area (Seattle and nearby forests) - unless, we consider an urban forest area undergoing vegetation planning and restoration. I live in a city greenspace. The city easement hosts a number of native and non-native edibles and NTFPs that are used by homeowners/residents and a number of homeless people in the area. However, I am initiating an ethnographic research project in Mexico that examines the political ecology of collaborative resource management (mostly NTFPs). Wild edible mushrooms are the major resources under consideration; these are harvested, prepared (dried and packaged) and exported to primarily foreign markets (Europe and Japan). The land tenure is under common property ownership held by a collective of communities (primarily "indigenous").
- Some of our members (The Alliance of Forest Workers and Harvesters) are involved in addressing NTFP issues.
- None known. (13 responses): "None unfortunately." "Sure wish I did!"
- I haven't worked with harvesters so I can't speak to this.
- No, but hopefully will be meeting people at this workshop.

4. Your Background:

a. What strengths, experiences, skills or knowledge do you have that would benefit this workshop?

- 9 years working with pickers, managers, and scientists.
- I'm a **producer and idea man**. I don't have time or desire to carryout the harvesting operations that are better suited for the more agile, youthful type. I have lands of various types providing a host of different NTFP valued resources. I

have applied agroforestry concepts to personal properties in Washington state, and Costa Rica. Intercropping with spatial and temporal optimum plantings to capitalize on space (canopy) and crop rotation (cash flow)

- ❑ Hands on and literal knowledge of **agroforestry** and diverse growing systems. Fairly good speaker.
- ❑ I have experience working as a **liaison** bridging harvesters and land managers to **increase communication** and information sharing.
- ❑ Strong background in **timber management**, understanding of ecosystems.
- ❑ I designed a civic science project with high school students at White Pass High School (Randle, WA) and I've done workshops on **participatory community assessments for the Bureau of Indian Affairs**. I recently completed a program in Whole Systems Design at Antioch University in Seattle.
- ❑ Community economic development practitioner and legal services advocate focusing on **community-based forestry as an empowerment tool in southern African-American communities**.
- ❑ Ability to share with and learn from a community-based forestry perspective in order to better plan for the health of southern forests in a way that is also compatible with enhancing land rich, cash poor communities.
- ❑ I assistant **managed a retail nursery** for 4 yrs, independent landscaping for two. Worked for 3 yrs in an orchard, (daughters fathers family owned). And as mentioned earlier, harvesting in the GPNF for 5yrs. **I love the woods** and spend most of my time in the GPNF (weather permitting).
- ❑ Familiarity with the **interface of mycology and forestry**.
- ❑ **Good understanding of policy and program** for the folks that are interested in using their national forests.
- ❑ Subject knowledge, good relationship with harvesters, and a **vested interest in seeing managers and harvesters better their communication**.
- ❑ Worked in plant nurseries for six years- four years in native nurseries. Two years leading watershed restoration team. **Active herbalist/plant geek! Knowledge of native plants, moderate knowledge of ethnobotanical, medicinal and culinary uses of Pacific Northwest native plants**. Love of forest areas and the local area.
- ❑ I am a physician and scientist developing the concept of Integrative Medicine.
- ❑ Professionally, I deal **with private landowners** who have a wide variety of experiences and abilities. I think it is important to design monitoring activities that are compatible with landowners if we want to monitor resources that occur on private lands. I can offer input relative to this perspective.
- ❑ Harvested in Western WA since 1985, on public and private industrial lands. I helped co-found the AFWH. I have spoke to national & regional events [F.S in DC, US Senate, US house of Reps., community groups etc]
- ❑ I have **time** to devote to helping push forward solutions to the challenges we face.
- ❑ An academic and importantly, **interdisciplinary** approach to looking at NTFPs.
- ❑ I've been involved in developing community-based collaborative projects since 1993. I speak **Spanish** (not fluently, but comfortably). I can share the PWCFC's experiences of working in participatory research/capacity building partnerships with underserved communities in community forestry.
- ❑ NTFP research in the WEST and other regions; **inventory and monitoring protocols**; former grant writing; **bilingual** in Spanish, allowing interactions with Latino harvesters and product buyers; technical and non-technical writing for diverse user groups interested in NTFPs
- ❑ I have done some research on ntfp issues in North America (value, supply and demand, consumption, motivations, policies, etc) and published a few articles and book chapters, given some presentations, taught at Tree School and other extension type venues about business opportunities, worked on the Oregon and the US Montreal Process Criterion and Indicator reports about ntfps, and presented research results at a few international forestry-related meetings about ntfp issues. I have also worked in the woods, in a variety of capacities, including timber cruiser.
- ❑ I am a biologist with a background in watershed restoration, and forest management.
- ❑ 50 years of being “on the dirt”. I have worked with the SFP officers on volumes and harvesting. I have seen many products wasted and have been told many times “there is no budget to put up sales or to do NEPAs” The budget barrier to inventory and monitoring is the cutting of the budgets for SFP officers!
- ❑ My experience with thinking through monitoring questions relating to NTFPs, from my work with the Northwest Forest Plan. Also, broader experience with socioeconomic monitoring gained over the last year.

b. Educational training/degrees:

Hands-on training/experience:

- ❑ 12 years studying Matsutake
- ❑ K-12, acquired knowledge from harvesting 18 yrs.
- ❑ My education is self taught beyond high school. I just turned 45, so I know a little about most things, but not a lot about anything.

Social Sciences:

- MS in International Development and a BA in Anthropology
- PhD, Sociology, Univ. California, Berkeley
- Bachelor of Arts, English Literature
- MA in Sociology: Environment & Communities

Interdisciplinary

- BA Biology, BA Environmental Studies, MA Anthropology, Phd Anthropology
- Graduate study in Environmental Anthropology, focus on political ecology. Previous fieldwork in forest ecology, basic ecological sampling.

Natural Sciences:

- BS, College of Ag Univ Idaho, DVM Wash State Univ, North America Temperate Agroforestry Assoc (4 yrs)
- BS in environmental policy and biology (1993-1998).
- AAS in Forest Resource Technology, senior @ OSU majoring in Natural Resources.
- BS Natural Resource Management, University of Michigan; Ph.D. Forestry/Social Sciences, University of Washington; MA Whole Systems Design, Antioch University Seattle
- JD: 1979, UC Berkeley; BS: 1971, African & African American Studies, Stanford University.
- Associates of Applied Science, Natural Resources, Mt Hood Community College, 1999; Bachelors of Science, Natural Resources, OSU, 2002
- B.S. Resource Economics/Forestry from UC Berkeley; M.S. and Ph.D. in Forestry from University of Minnesota
- Ph.D. Forestry/Soil Science, NC State Univ., Raleigh, NC; 1981
- PhD in Botany (Plant Ecology)
- M.S. Forest Science
- Forestry
- Forest Management: AS
- BA Biology Whitman College in Walla Walla WA 1978. MS Forest Economics Oregon State University College of Forestry in Corvallis OR 1988. Ph.D. Forest Resources. Minor in Agricultural and Resource Economics. Oregon State University College of Forestry, Corvallis, OR. 1995.
- BA in Biology from the U of O
- High school diploma with some community college classes.

Other fields:

- MD
- Business degree

c. Years involved with NTFPs:

Years Involved with NTFPs	Number of Participants
0	Three
1 year	Four
Between 2 – 5 years	Five
Between 6 – 10 years	Two
Between 10 – 15 years	Three
Between 15 – 20 years	One
Between 21 – 30 years	Four
Between 31 – 40 years	Two
Between 41 – 50 years	One

This question received responses like:

- 8 years as a researcher. Lifelong as a user, harvester, jam and jelly maker, subsistence food gatherer—since I could sit on a bucket and pick berries.
- Roughly 20 years on a recreational basis, about 3 years as a researcher, and 1 year on NTFP monitoring.
- 30 as personal harvester, 12 with job

