

THE ROLE OF NON TIMBER FOREST PRODUCTS: A CASE STUDY OF GATHERERS IN THE EASTERN UNITED STATES

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Abstract- Non Timber Forest Products (NTFPs) play a key role in the lives and livelihoods of rural residents in or near forested areas. Consequently, organizations concerned with rural development have begun to look toward NTFPs as an opportunity for rural economic development. Concerned with the potential implications for the social and ecological structures that support NTFP harvesting, this work in progress plans to explore the culture and practices of gatherers. Using qualitative research methods including in-depth ethnographic interviews, we will document NTFP uses and users in the eastern United States. Individual case studies will give gatherers and micro-enterprise owners a voice to reveal their experience with and perspective on gathering. Natural resource managers and rural developers must have a clear understanding of the role NTFPs play in the lives and livelihoods of gatherers before they develop management plans.

Introduction

A NTFP is any product "constituting or derived from trees, shrubs, forbs, non-vascular plants, fungi, and micro-organisms that live in forest or grassland ecosystems (USDA Forest Service 1995)." These products may be thought of as falling into four categories; edibles, florals, medicinals, and ornamentals. Edibles include such products as wild mushrooms, fiddle heads, maple syrup, and huckleberries. Floral products such as ferns, mountain laurel and babies breath are used by gatherers to make crafts or sold to floral enterprises. Medicinal products are used for their healing properties. Ginseng, St. Johns Wort, and Echinacea are among the medicinal products used by gatherers for self-healing. Some of these products are also sold in the domestic market in raw and processed forms. Other products, for example boughs, black ash and beargrass are used to make ornamental products such as baskets, Christmas wreaths, and swags.

Gatherers harvest NTFPs as a commercial, subsistence or recreational activity (Love & Jones 1995). Trade, barter or sale of NTFPs in the local or international market can bring capital to people isolated in rural forested areas (Schlosser

& Blatner 1995). These financial resources are essential in areas where seasonal employment and high unemployment rates are prevalent (Emery 1998a). Subsistence gathering supplies households with raw products for personal use. Edible and medicinal products are essential to the gatherers' subsistence living. Recreational gathering is an important part of the tradition of gathering as many people gather with friends and family (Love & Jones 1995).

The voice and perspective of gatherers has been absent from discussions surrounding the NTFP industry (Love & Jones 1995). Instead, research into the viability of the NTFP industry has been grounded in the testimony of buyers and micro-enterprise owners. To understand the ecological and social sustainability of the NTFP industry the experience and knowledge of gatherers must be presented. Without an understanding of gatherers it is impossible to develop comprehensive, enforceable policy (Love & Jones 1995).

Presently, policy makers and rural development specialists increasingly strive to include NTFPs in economic development and land management plans. The establishment of such plans will likely have a significant impact on gatherers' access to and use of NTFPs. Consequently, the relationship between gatherers and the resources that support the NTFP industry must be further explored and better understood to encourage the development of plans that reflect the relationships between gatherers and NTFPs.

Literature Review

Non Timber Forest Products

Researchers have begun to adopt new methods and approaches to NTFP research (Anderson & Rowney 1999, Emery 1998a, Richards 1997, Richards & Creasy 1996, Anderson & Blackburn 1993). These new methods focus on gatherers' knowledge, experience and plant management regimes. With a better understanding of gatherers' practices and the culture of gathering, researchers assess the impacts of gathering on forest health and the relationship between the resource and the gatherer.

Richards' research looked at the knowledge of gatherers to explore the relationship between Tanoak mushrooms, also known as Matsutake, (*Tricholoma magnivelare*) and forest health. In-depth interviews with the Karuks, a tribe of Native Americans gathering and using Tanoak mushrooms, were conducted. The Karuks described the methods and rules that govern the gathering of Tanoak mushrooms as well as providing information on where and under what conditions the mushrooms thrive. In Richards' concluding arguments she noted the importance of traditional knowledge possessed by gatherers as a resource for forest researchers and resource managers (Richards 1997).

Research conducted by Anderson and Rowney tested indigenous harvesting regimes and their effect on the vegetative reproduction of edible plants. The study focused on the resource management strategies of Native tribes in

California. From the research it was found that the indigenous resource management regimes tested increased the density and population of *Dichelostemma capitatum*, commonly known as blue dicks (Anderson & Rowney 1999).

Research conducted by Emery in Michigan's Upper Peninsula explored the role that gathering plays in the lives and livelihoods of gatherers. Through in-depth interviews with gatherers Emery discovered the social values of gathering. Emery discusses the livelihood, cultural and recreational value of gathering to both Native American and European American gatherers. Emery suggests that these values might be displaced by large-scale commercialization (Emery 1998). Consequently, she suggests caution in the use of NTFPs as a tool for economic development in rural areas.

Emery also found many gatherers had accumulated a great deal of knowledge as information is passed from generation to generation of gatherers. Not only did these gatherers have considerable knowledge about the resources but they had implemented stewardship norms to sustain the resources that they depend on (Emery 2000). Emery suggests that local knowledge of individual gatherers be incorporated into policy, research and land management (Emery 2000).

Review of the literature illustrates the value and importance of incorporating gatherers' knowledge and experiences into ongoing research and policy making. Some gatherers possess a great deal of valuable information, without which the NTFP industry can not be fully understood. It is only through further research into the culture of gatherers that we can fully develop our understanding of the role that these resources play in the lives of gatherers and the relationship that lies between gatherers and the resource.

Hopefully a greater understanding of that dynamic will influence the creation of land management policies that reflect the relationship between gatherers and the resource.

Qualitative Analysis

The qualitative approach used in this study, grounded theory, was introduced in 1967 by Glaser and Strauss. Grounded theory generates concepts, theories and generalizations from data. Theory is developed from the bottom up as pieces of data are connected to provide a descriptive representation of the social phenomena under study. This inductive process is essential during the preliminary stages of grounded theory. Qualitative researchers implementing grounded theory, "do not search out data or evidence to prove or disprove hypotheses they hold before entering the study; rather, the abstractions are built as the particulars that have been gathered are grouped together (Bogden & Bicklen 1998)."

While the deductive reasoning process is not incorporated into the preliminary stages of grounded theory, it does play a role in the overall research design. Deductive reasoning is a useful tool in the later stages of grounded theory, during which hypotheses and theories may be tested against the data. "Generating theory from the data means that most hypotheses and concepts not only come from the data but are systematically worked out in relation to the data during the course of the research (Glaser & Strauss 1967)."

Through the combination of inductive and deductive processes, grounded theory both develops and tests theory. Dewey (1938) notes, "induction and deduction must be so interpreted that they will be seen to be cooperative phases of the same ultimate operations." Shelly and Sibert (1992) suggest this complementary relationship between deductive and inductive processes (figure 1).

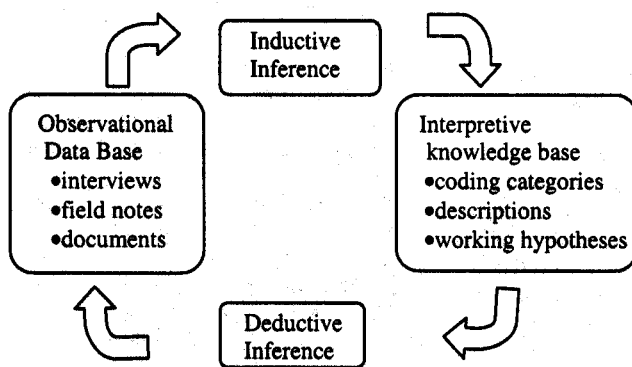


Figure 1. The induction-deduction process used in qualitative data analysis (after Shelly & Sibert 1992).

This approach to qualitative research is especially useful in studies exploring subjects where little previous research has been conducted. The inductive reasoning process allows the researcher to discover and explore phenomena and relationships between phenomena that they might not have been aware of previously. Consequently, unknown

relationships and meanings emerge as the research process generates theory through analysis of descriptive data.

Study Design & Methods

Concerned with the potential implications of land management policies and rural development plans on the

ecological and social structures that support harvesting of NTFPs, this work-in-progress has three main objectives:

1. to discover how and why people in the eastern United States gather,
2. to develop an understanding of the role NTFPs play in the lives and livelihoods of gatherers, and
3. to represent the experience of gatherers.

An invisible group, gatherers, are often difficult to locate and contact. Some gatherers live and work in remote rural areas. Others are not accessible by telephone. Legal and tax concerns can make some gatherers reluctant to talk about their work. Language barriers may, for example, hide Spanish speaking migrant workers.

Network sampling was implemented to overcome these difficulties and locate gatherers. Gatherers have been identified and located using a variety of sources from the academic arena to the arts and crafts community. Sources include state foresters, anthropology, sociology and forestry professors, NTFP researchers, members of the Society for Economic Botany, The Northern Forest Center, craft guilds, The Appalachian Studies program, and the Internet. Not only did these sources aid in locating and contacting gatherers but also in gaining gatherers' trust.

As gatherers are identified we make contact by telephone or through in-state representatives. We explain how we received their name and who recommended we talk with them about gathering. During the initial contact we also introduce ourselves and the project. After explaining the project and our interests, we ask each gatherer if he/she is willing and interested in talking with us about their gathering experiences. Interview sessions are scheduled and conducted at the convenience of the gatherer.

Through the combination of informal and formal interview styles, a consistent set of data is being collected. The structure and organization of the formal interview is rooted in an interview schedule, a list of predetermined questions that guide the interviews and maintain a consistency across each interview. Simultaneously, the implementation of open-ended questions associated with informal interview techniques allows the gatherer to determine the direction of the interview as they express their perspective on gathering. The combination of these two interview styles results in a set of data describing the culture of gathering that is reliable and thorough. Questions asked during the formal interview were adapted from Emery's previous research in the Upper Peninsula of Michigan (Emery 1998a). They include:

- What do you pick?
- What tools do you use to gather?
- Who do you pick with?
- When do you pick?
- What type of forest do you pick in?
- How do you use what you gather?
- Who owns the land you gather on?

These questions focus on the experience of gatherers. Data such as age, gender, employment, ethnicity and length of residence are also collected at the time of each interview.

Interview sessions last approximately one to two hours. At the conclusion of the interview each gatherer is asked to provide suggestions to improve the interview schedule or the process in general. These comments help to shape the interview sessions that will follow.

In keeping with the iterative approach of grounded theory, data analysis has begun in the early stages of research. As interviews are conducted and transcribed we are starting to review the text looking for patterns in the data. In a process known as open coding, code categories are developed and applied to interview transcripts as our understanding of gathering grows (Creswell 1998). ETHNOGRAPH®, a computer software program capable of single code and boolean searches, aids in further identification of patterns within the data.

We plan to produce ten case studies of individual gatherers from various regions throughout the eastern United States. Case studies will highlight a variety of products gathered in the various geographic and ecological regions. Each gatherer profile will also describe a key aspect of the relationship between gatherers and NTFPs. From this research we hope to develop our understanding of the culture of gathering and the role that gathering plays in the lives and livelihoods of gatherers. It is also our hope that this research will help to bring the perspective of gatherers to future policy making efforts.

Preliminary Results

Results from the first stage of interviewing and analysis focus primarily on the role that NTFPs play in the lives of gatherers. Interviews with a mushroom gatherer and a bough and fern gatherer have begun to reveal some of the relationships between gatherers and NTFPs. We present four examples of the roles that these products have played in the lives of two Vermont gatherers. We begin by describing a key aspect of gathering for that individual, which is then illustrated by a quotation taken from the interview. It is our hope that the voices of gatherers emerge through these quotes, accurately presenting their perspective and relationship with the resource. Quotations are followed by brief examinations of implications for rural economic development and land management.

Meeting Specific Needs

In 1946, Mary, a French immigrant, moved to the United State with her American GI husband. Several years later, following a divorce, Mary remarried and moved to Vermont. As the mother of five children living in rural Vermont, Mary began to gather ferns, princess pine, and boughs to make extra money for Christmas presents, birthdays and summer trips. Mary's work in a nearby forest supplied her with a modicum of financial independence and made it possible for her household to meet needs that exceeded her husband's income as a plumber.

"It was Christmas money, that is what it was. And the other was vacation money. We used to go to Canada with the money. So that is what it was."

Because owners of small NTFP businesses are dependent on gatherers to supply them with their raw material, it is important for them to understand this needs based relationship. The gatherer is not harvesting to maximize income. Rather he/she is working to meet a specific need. Once the gatherer has met that need, they will stop working. The business owner who understands this relationship is more likely to build a micro-enterprise that can succeed under such circumstances.

Protecting for future use

Although gathering was hard work at which Mary made little money, she enjoyed the opportunity to get out of the house and walk in the woods. Every morning from early spring to late fall, Mary's husband dropped her off at a forested area ten miles from their home. For several years, up until the death of Mary's husband, she returned to the same location to gather ferns and princess pine. Mary protected her site by keeping the location of her supply hidden from other gatherers. Mary's gathering norms were also important in protecting the resources she depended on during those years.

"You don't cut them all out. You leave some. You just cut the big ones. You know the long ones. The small ones you leave for the next year, the next crop."

Gathering norms and behaviors are influenced by the role gathering plays in supplying a needed source for supplemental income. Many gatherers implement harvesting methods which promote and encourage a healthy and sustained plant population. Gatherers take active steps to protect NTFPs as a result of the uncertainty behind when or if they might need to rely on the resource in the future.

Building Social Networks

Ron, a librarian, professional musician and radio show host, has spent the past thirty years following his interest in wild edibles. He first discovered a variety of wild edibles growing in his neighborhood as he walked to work. With a love for food and ample free time Ron began gathering wild edibles. Sharing these resources with friends and family has played an important role in developing and building social networks and relationships over the past thirty years.

"There are certain things, that you know if you find them and they are really something, then you give them away to people you love or you make nice dinners."

Gift giving and reciprocity are an important part of the gatherers' culture (Emery 98a). The creation of social networks ensures the survival of the group. Each member can count on the others in the social network to support them in times of need. This type of network is essential in

areas where high unemployment and poverty are prevalent (Emery 1998a).

Supplemental Income

To support his family, two young sons and wife, Ron often relies on multiple livelihood strategies. One strategy, gathering, contributes to his household by supplying a source of supplemental income and edible products for subsistence. Gathering Blackberries, used in pies and jams, Ron contributes to his family's subsistence. Occasional Blackberry bartering with Ben Cohen and Jerry Greenfield provided a supply of free Ice cream. As Ron became involved in hunting wild mushrooms this livelihood strategy continued. Sale and barter of wild mushrooms to restaurants and local grocery stores provides Ron and his family with free meal tickets and supplemental cash income.

"There have been times when I haven't had a lot of money when it was really nice to get lump, eighty or hundred bucks, it was like pennies from heaven."

Gathering is typically one of several livelihood strategies pursued by individuals and or households (Emery 1998). Gatherers turn to the resource most often when there is no other available source of income. Forest resources provide access to small amounts of needed cash income.

Conclusion

The exploration of the relationship between gatherers and NTFPs and the role they play in the lives and livelihoods of gatherers is necessary as rural developers and land managers devise policies and development strategies for rural areas located near forested land. It is our hope that the case studies emerging from this research will help rural developers, land managers, and entrepreneurs alike, as they will begin to understand the relationship between gatherers and the resource. This should allow them to see how that relationship might influence the plans they are developing whether they are business plans, rural development plans, or land management policies.

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